WHOLESALER'S SALESMAN

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For Wiring Small Homes

New Type MO
Multi-breakeR

☆ This new Square D Multi-breakeR provides service entrance with two 15, 20 or 25 ampere lighting circuits and 35 ampere mains capacity. Each circuit is independently switched and individually calibrated. It eliminates fuses—a movement of a lever restores the circuit. Built with either surface or flush mounting. The list price is only $2.65.

There are larger Multi-breakeRs for every type of building. Both you and your contractors will profit by Multi-breakeR installations.

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SQUARE D COMPANY

DETROIT - MILWAUKEE - LOS ANGELES

IN CANADA: SQUARE D COMPANY CANADA LIMITED, TORONTO, ONTARIO

TIMES and TRENDS

FEBRUARY.....1940

Twenty Years This issue marks the twentieth anniversary of the publication which, founded in 1920 by Howard Ehrlich and associates as *The Jobbers Salesman,* re-named *Electrical Wholesaling* in 1932, finally completed its metamorphosis in 1937 and emerged as *Wholesaler's Salesman.*

Anniversaries and more particularly those that mark the passing of a decade or more, traditionally are made the occasion for retrospect, appraisal, comparison—fasting or feasting, as the facts may warrant. So, we have tried to square the contents of this issue with tradition.

Those of our readers who would revel in retrospect will find some of the pages that follow much to their liking; although volumes would be needed to review in greater detail the forces, social, commercial, industrial and economic that in these twenty years have left their imprint upon our industry.

As to appraisal.—Of electrical wholesaler's past performance during the last two decades—the records of growth in numbers and sales volume, herein recorded, are eloquent testimony that as individuals and as a group wholesalers have kept pace with the increasing demands that more manufacturers on one side and more buyers on the other have made on them. As always, *Semper Paratus* has been the watchword of the industry. Of future opportunities.—The pages devoted to the Wholesaler's Market in 1940 supply the answer, prove conclusively that today our opportunities for service, sales and profit are greater than ever before.

Comparison.—Few, other than those statistical, can serve a constructive purpose in an industry that has so many ramifications, that is moving so constantly, so ever-changing in tempo, that only those who can swiftly miter their methods and minds with the moves of the moment may hope to survive.

And of Feasting.—Yes, there is cause.—Having survived we now give thanks to those pioneer manufacturers who through their early support made it possible for this publication to outgrow its swaddling clothes period, and we are equally grateful to those who since then have given us the benefit of their support and advice. We hope that in the future even more than in the past, their cooperation with us will bring increased sales and profits to them.

Also—we take pride in the fact that through the years we have been able to affirm and reaffirm that wholesaling is an essential and indispensable function which, when economically performed, creates a desirable, enduring and profitable partnership between the manufacturers who make the products, and the wholesalers who distribute them.

We believe that in the past we have presented material that has helped to improve the technique of the industry, increased its efficiency, reduced its operating costs, made for better management, better morale, better salesmanship and so, inevitably, it must have served to produce better over-all results for all concerned.

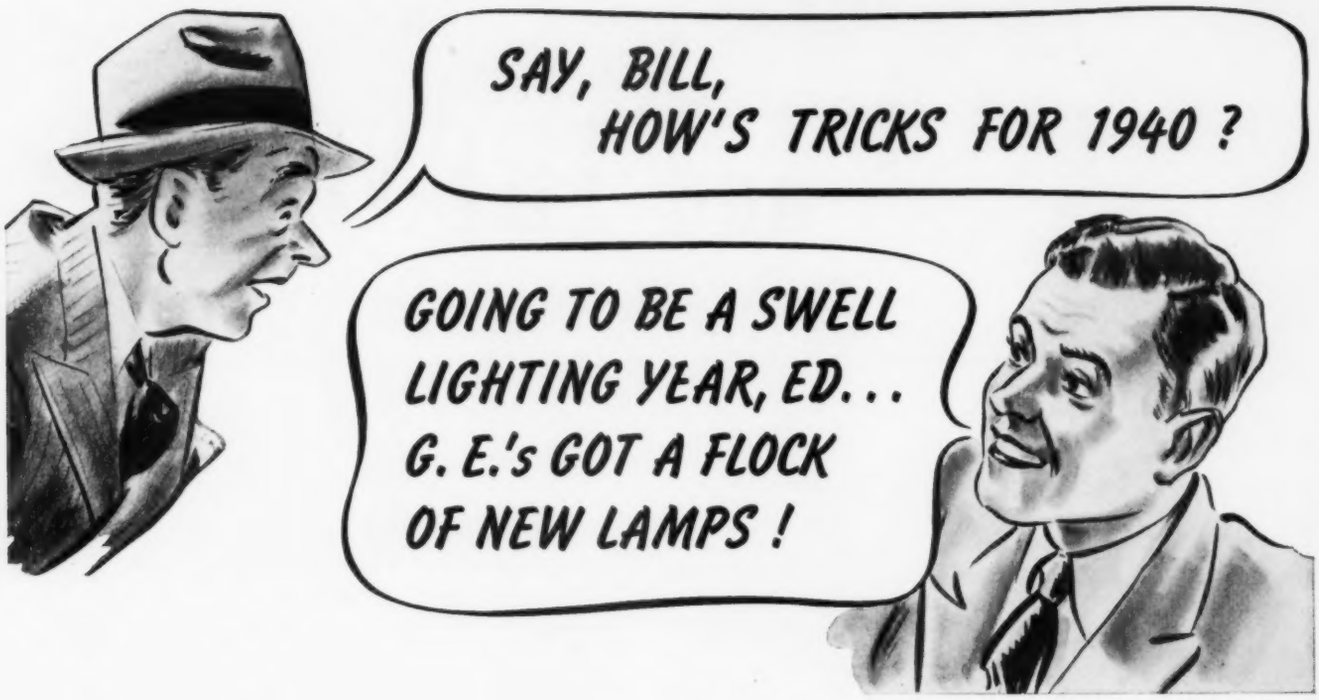
On this occasion—our twentieth anniversary—we re-dedicate this publication and its staff to a continuous and ever improving exemplification of that policy.

Help Census Takers Many wholesalers, contractors, yes, business men in general are inclined to consider U. S. census reports and any other reports as a distasteful chore that should be dodged as long as possible.

Actually they are simply hurting themselves when they try to wriggle out of giving the desired information.

In this big country of ours business cannot and does not move at the same pace and at the same time in all areas, because local prosperity and general business conditions are affected by different factors.

HERE'S WHY 1940's GOING TO



BILL: *. . . and in all the years General Electric has been making lamps, we've never had so many interesting new ones to sell as today. For example, we've got the* G-E *Projector and Reflector lamps, the* G-E MAZDA *H mercury lamps, silvered bowl lamps, drying lamps, fluorescent lamps, and . . .*

ED: What about fluorescent lamps? A lot of my customers want "F" jobs.

BILL: *Mine too. But I'm selling 'em on a profitable basis.*

ED: How do you mean?

BILL: *Just this: Simply because a lamp is new doesn't mean it's a cure-all.*

ED: Yeh, I know, but lots of folks think they give more light for the money . . . Boy, are those F lamps a swell number!

BILL: *Sure, they're a swell number when you sell 'em right.*

ED: Sell 'em right! Well I'll be a . . .

BILL: *Take it easy. This customer of mine runs a store—see. He wants this new fluorescent lighting put in because he thinks he can save money—and so help me he's only got eight footcandles in his store now.*

ED: Why he ought to have forty to stay in business!

BILL: *Right! So I tell him the only way he can save money on his lighting is to turn out his lights . . . Then I show him why he needs five times as much light as he has to sell more goods.*

ED: Did you sell him?

BILL: *I sold him the idea of more light. He bought F lamps—even though they cost him more to install and he's using twice as much juice as before.*

ED: I thought fluorescent was the thing to use when you wanted more light but didn't want to rewire.

BILL: *Well, that all depends—you've got to figure each job separately. You first got to sell the customer on what he needs in the way of light. Then you figure the best and cheapest way of getting it. One time it's fluorescent. Another time it's filament. Sometimes it's a combination of the two.*

ED: And when the customer wants or needs daylight . . . say where colored goods are inspected or sold, I guess that's fluorescent.

BILL: *Yes, but in general when color or heat isn't important, it's a matter of figuring comparative costs, considering writing off of fixture costs, and lamp and current costs.*

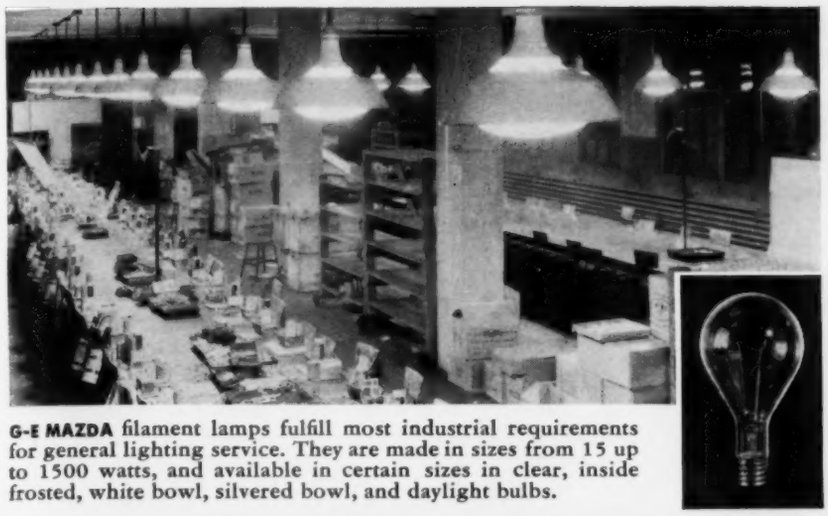
ED: Say, those F lamp colors are really something for colored light, aren't they?

BILL: *They're swell in the right places—and that's important. Remember, Ed, G.E. makes lamps for every kind of lighting, and there's a right kind of lighting for every job. I try selling customers the kind of lighting best suited to their jobs. They'll be better satisfied. And by the end of 1940, I'll make more neat profits for myself.*

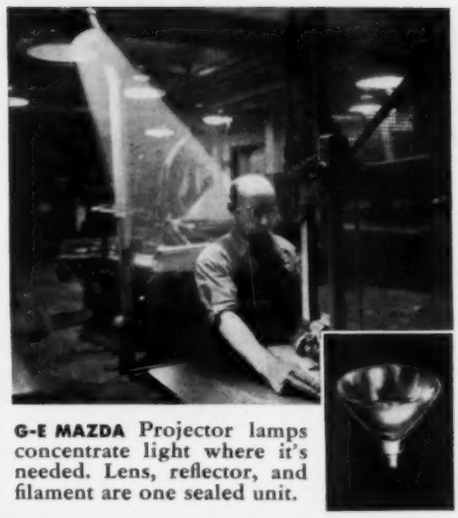
ED: Sa-ay . . . I've got two customers who . . . Where's my hat?

BILL: *On your head, dope. Good luck!*

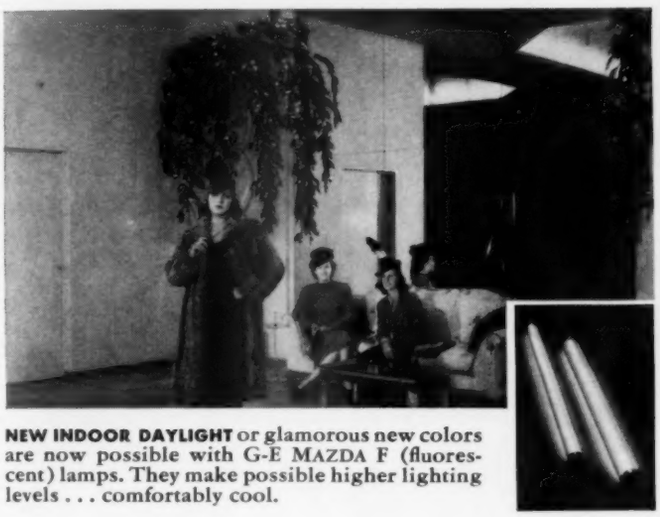
BE A SWELL LIGHTING YEAR !



G-E MAZDA filament lamps fulfill most industrial requirements for general lighting service. They are made in sizes from 15 up to 1500 watts, and available in certain sizes in clear, inside frosted, white bowl, silvered bowl, and daylight bulbs.

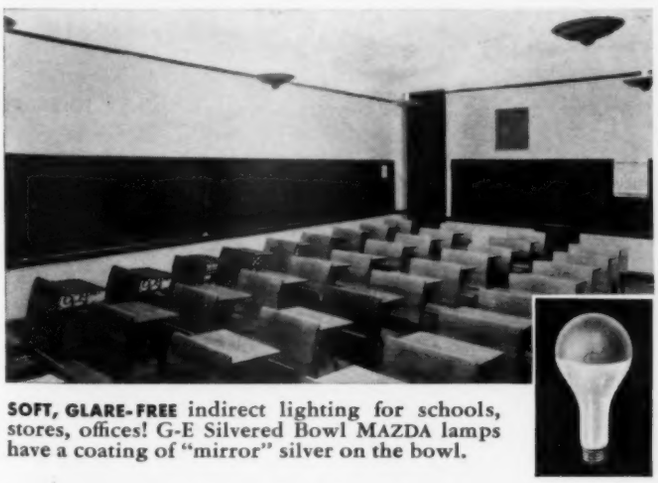


G-E MAZDA Projector lamps concentrate light where it's needed. Lens, reflector, and filament are one sealed unit.

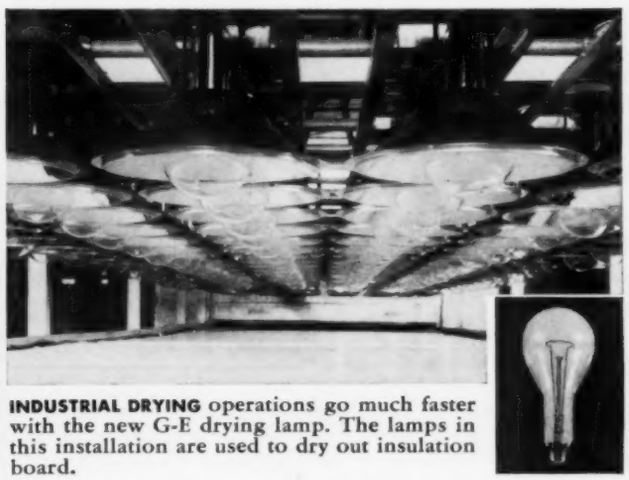


NEW INDOOR DAYLIGHT or glamorous new colors are now possible with G-E MAZDA F (fluorescent) lamps. They make possible higher lighting levels . . . comfortably cool.

G-E MAZDA H (mercury) lamps—400 watt size shown—have high efficiency, long life and ruggedness—very practical for high bay areas. May be used advantageously either alone or in combination with filament lamps.



SOFT, GLARE-FREE indirect lighting for schools, stores, offices! G-E Silvered Bowl MAZDA lamps have a coating of "mirror" silver on the bowl.



INDUSTRIAL DRYING operations go much faster with the new G-E drying lamp. The lamps in this installation are used to dry out insulation board.

G-E MAZDA LAMPS

GENERAL ELECTRIC

Made to stay brighter longer

If the grain states should have a big crop and get good prices, thereby making local business good, the cotton states might still be having a tough time, coal and mineral mining might be at low ebb, shipping in the coastal states might be tied up.

Only factual data on all kinds of business in all parts of the country can provide the knowledge on which to base more intelligent planning that may serve to avoid business declines and disasters in the future.

Every business man can do his bit toward improving his own future by supplying factual data, when it is requested by a reliable and impartial agency.

Current vs. Coffee The coffee interests are much concerned over the fact that average annual per capita consumption of coffee is only 14 pounds, at an average of 25 cents per pound, about $3.50 per year.

That's for the semi luxury beverage that is used generally about three times a day—at mealtime.

What a lot of weeping the electrical industry should do—comparatively speaking—for even in 1939 (according to *Electrical World*) the average per capita consumption of electric current, figured at average rates, amounted to only $6.90 per year. And that's for something that is used and actually useful twenty-four hours of the day.

We submit that, based on those figures, the electrical industry still has a tremendous selling job to do before the average "hourly" current consumption ratio can approach that of coffee. At the coffee ratio our average annual current consumption should be about $28 per capita.

Beware Within the last few weeks at least two so-called "manufacturers" of incandescent lamps have run afoul of the Federal Trade Commission.

They imported lamp bulbs manufactured in Japan, and printed and marked "Made In Japan." Then, says the F. T. C., before selling such bulbs, those pseudo manufacturers *"buffed off"* or otherwise removed the words "Made In Japan." The bulbs were placed in cartons upon which were printed the words "Made In U.S.A."

One of those traitors to his country even advertised that those fraudulently labeled lamps were "made in conformity with the specifications of the U. S. Bureau of Standards."

Japan still ships millions of bulbs to this country. Daily fewer Americans are willing to buy Japanese goods. These disclosures show how such goods are fraudulently sold to the unsuspecting public.

To stop this fraud every wholesaler's salesman should tell all his customers about these deceptive tactics that are employed by fake concerns in undermining legitimate American business.

Boosting Building The United States Savings and Loan League estimates that home owners, builders and buyers have waiting for them $1,500,000,000 that can be borrowed through 8,000 local Building and Loan Associations during 1940.

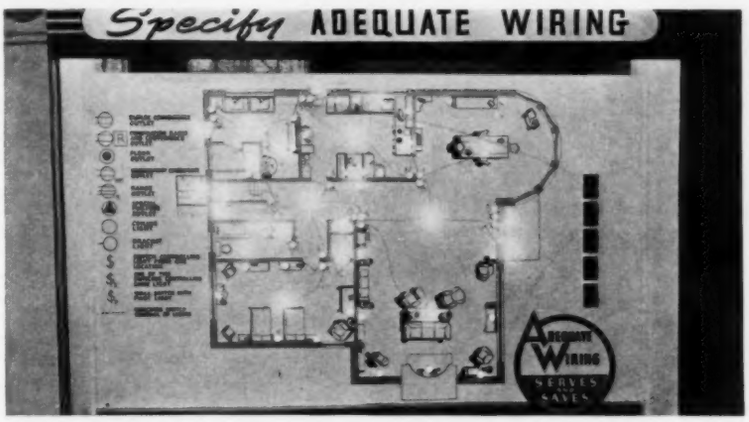
Financing new homes, additions, modernization jobs, through those associations is an easy way, and terms of interest and monthly payments are exceedingly reasonable.

Cue for wholesaler's salesmen is to talk these facts up to contractors, get them to go out and do some digging.

Many extra re-wiring jobs and appliance sales can be wrapped up in a modernization project, and—who would not like to get some extra business?

EDITOR

Wholesaler Salesman's NEWS



LIGHTS SHOW the difference between sub-standard and Adequate Wiring in this display board used by the Adequate Wiring Bureau in San Antonio. This bit of showmanship for dramatizing adequacy in wiring, was designed by the San Antonio Public Service Co., costs about $60. White bulbs represent lighting outlets; blue ones indicate switch locations; red bulbs locate convenience and special purpose outlets. Five toggle switches control them.

Wholesalers To Profit From NEMA's 1940 Program

Manufacturers' group all set with energetic plans to boost sales again this year. Program covering many commodities beneficial to wholesalers and others

THIS year the National Electrical Manufacturers Association is going forward with a program of 71 activities and services that will boost sales and profits for wholesalers, contractors, dealers and utilities, as well as NEMA's membership of some 360 electrical manufacturers.

Of these 71 projects, a good percentage of them directly deal with the business development of lines that are regularly sold by the majority of wholesalers, so it is good business for the wholesaler to tie-in with these efforts in order to increase his own volume. Here are the main NEMA activities for 1940 having direct bearing on the wholesaler's business—

National Adequate Wiring Bureau. In this drive for better wiring, NEMA provides office space and personnel, including field men to work with local groups. Its success means greater sales of wire, control equipment, wiring devices.

Federal Construction Projects. Cooperative effort with federal housing and construction agencies concerning electrical requirements. This is another aid towards more supply, lighting and appliance sales.

Commercial Electric Cooking Council. Works with EEI in selling electric cooking to hotels, restaurants, etc., thus developing this market.

Electric Kitchen Promotion. A joint activity with EEI to help the trade sell electric appliances for the kitchen as a package.

Electric Range Program. Continuation of the national advertising and promotion drive to tell the public about the advantages of cooking electrically. This is an extremely valuable tool for wholesalers of major appliances.

Electric Roaster Program. Hard hitting campaign to get over the roaster story—therefore build roaster sales for wholesalers and their customers.

Electric Refrigerator Program. NEMA makes available newspaper mats, folders, window cards and banners, etc. to local groups for citing advantages of this appliance.

Electric Water Heating Program. The baby of major appliances is growing through consistent advertising on a national scale.

Better Light—Better Sight. Highly successful campaign, in which NEMA cooperates with the National Bureau, is moving ahead as hard as ever. So far 7 million I.E.S. lamps have been sold.

Rural Electrification. Studies rural market and works with R.E.A., rural newspapers, magazines, 4-H clubs, etc. in pointing out how electricity can be put to work on the farm. This activity obviously stimulates wholesalers' sales.

The Producers' Council Cooperation. The council, an affiliate of the American Institute of Architects, offers NEMA an opportunity to publicize electricity to 9500 architects and engineers, therefore create a demand for individual electrical products.

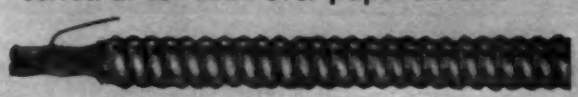
Electrical Leagues. National programs depend on local operation, so NEMA aids efficient local groups both financially and in numerous other ways towards success in business development programs.

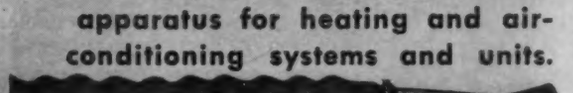
Commercial And Industrial Electrification. Making studies with the possibilities of developing programs to show these markets how further electrification will permit them to operate more efficiently.

HAZARD
ARMORED CABLES

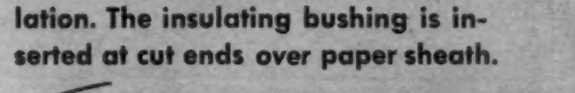
Hazard Armored Thermocable
has heat-resisting rubber insulation on each conductor, colored tor identification, and armored for mechanical protection. Insures positive operation of control apparatus for heating and air-conditioning systems and units.

Hazard Armored Cable, Type AC
has a flame-resisting, moisture-proof paper sheath between the conductors and spiral interlocked steel armor. A ripcord beneath the paper facilitates installation. The insulating bushing is inserted at cut ends over paper sheath.





Hazard Armored Ground Wire
with tinned copper conductor without insulation, armored for protection. The armor makes grounding assurance doubly sure.



Hazard Flexible Steel Conduit
is offered as a single unit. This strong but flexible conduit saves time and expense for short runs, or where many bends must be made.

A complete line carried by
ELECTRICAL JOBBERS

ADEQUATE WIRING SERVES AND SAVES

New England Sales Agent
R. J. McGOLDRICK COMPANY
184 Pearl Street, Boston, Mass.

New England Sales Agent
ABBOTT S. KNOWLES
32 Church St., Meriden, Conn.

HAZARD INSULATED WIRE WORKS
DIVISION OF THE OKONITE CO.
WORKS: WILKES-BARRE, PENNSYLVANIA

New York Chicago Philadelphia Atlanta Dallas Washington Cleveland
Pittsburgh Buffalo Boston Detroit Seattle San Francisco St. Louis Los Angeles

BETTER SELLING—thicker pocketbooks. Walter Zepf, George Cox and Ed Campbell, city salesmen for Riechman-Crosby Co., Memphis, get bonus checks for extra sales on ILG unit heaters from their manager, H. S. Wright.

Square D Buys Kollsman Instrument

A few weeks ago, the Square D Company purchased the Kollsman Instrument Co., Elmhurst, N. Y., manufacturers of equipment for the aviation industry, paying about $4 million for the business. The Kollsman organization will remain intact and the aviation equipment such as altimeters, accelerometers and tachometers, will be marketed as heretofore, but Square D expects that some of the principles and devices will fit into present and future development in its present lines and will be marketed through the Square D sales organization.

Paul Kollsman built his business in just a few years but prefers to devote his abilities and attention to research and invention rather than to business details, so the current deal was mutually agreeable. He remains with Square D as a consultant for at least three years and Square D has an option to buy his new inventions during the next ten years.

'39 Over '29 By 55 Per Cent

In Kansas City, the electrical industry has been plugging the Red Seal Plan for 13 years. In 1929 they put the seal on 400 homes and apartment homes. In 1939 a total of 621 home units were approved, an increase of 55 per cent over the previous high. During 1938 the total was 304, so '39 beat that by 104 per cent. It all goes to prove that good wiring can be sold, profit all concerned.

New Name For McCarthy Bros. & Ford

BUFFALO, N. Y.—On the first of last month, McCarthy Bros. & Ford changed its name to Buffalo Electric Co., Inc., thus more closely identifying itself with its geographic location. President Karr Parker said the name change does not involve changes in management, personnel or ownership.

Save Vision Week

Next month, from the 10th to 16th, the American Optometric Association is holding its annual "Save Your Vision" week and that is an opportunity for wholesalers and their salesmen to tie in for a boost in lighting sales. Utilities are promoting the program along with the optometrists, so the good word is going to get around.

Joint promotions such as this are usually effective. For instance, members of the Electrical Association of Philadelphia held their Seventh Annual Fall Lamp drive during October, results of which were announced a few weeks ago. Manufacturers and wholesalers worked with dealers in the five counties of that territory and those retailers sold 2,022,534 lamps, with a retail value of $338,884, went 26 per cent over last year.

S & M Appointments

LOS ANGELES—Four new district managers have been appointed by S & M Lamp Co. recently. Charles G. Lifka, 4450 John R St., Detroit, is selling the trade in Michigan and northern Indiana. Cyril T. Barry, 2308-27th Ave., So., Minneapolis, covers Minnesota, the Dakotas and western Wisconsin. Don Six, 1004 Charter St., Tampa, Fla., pushes the line in the Carolinas, and T. R. Donnelly, 298 Duquesne Way, Pittsburgh, sells in parts of Pennsylvania, West Virginia and Ohio.

Wholesalers Adding New Lines

Many wholesalers representing various parts of the country report they have taken on additional lines during recent weeks. Apparently getting set for increased demand

MOST wholesalers and manufacturers agree that there are two ways for the wholesaler to get greater volume. One is sell more intensively. The other is to handle a broader range of products to serve more markets, more effectively. Naturally a combination of the two takes the wholesaler on the road towards both greater volume and better nets, which is the hope of the entire industry, and many wholesalers are working consistently in that direction.

With 1940 still a youngster of about six weeks, numerous wholesalers are preparing for better sales for the year through adding new lines. And the following have reported to *Wholesaler's Salesman* their recent additions:

In Denver, Central Electric Supply Co. has made several additions, the latest being Vision-Aid fixtures. New England Electric, same city, states that Ray-O-Vac flashlights and batteries are latest items. Another Denver house, Poindexter Electric Supply Co., is also selling a new flashlight line—Comet.

Salesmen for The Universal Electric Co., Muncie, Ind., are now selling Manning Bowman appliances for the first time. In Cleveland, the sales staff of The George Worthington Co. is telling its customers about Bulldog switches and Ivanhoe lighting equipment. The Mine & Smelter Supply Co., Salt Lake City, has added Westinghouse motors, control equipment and transformers. Crosley refrigerators and radios are latest newcomers to the sales catalogues of The Wahn Sales Co. division of George H. Wahn Co., Boston, and the complete Crosley line has been taken by California Electric' Supply Co., San Francisco, for distribution in that territory.

Virginian Electric, Inc., Charleston, W. Va., is now distributing General Electric refrigerators, ranges, water heaters. DeWald radios have been added by B. M. Tower Co., Bridgeport, Conn., and Bangert Electric Supply, Jamaica, L. I., N. Y. Handy Hot Washers are being pushed by salesmen of the Missouri Valley Electric Co., Kansas City.

Hotpoint has named several new distributors recently. They are the Graybar houses at Cleveland and Minneapolis; Stratton-Warren Hardware Co., Memphis; and the Fergerson Co., Paducah, Ky. Graybar's Los Angeles house is selling Gibson refrigerators and ranges.

HOW GENERAL ELECTRIC HELPS DISTRIBUTOR SALESMEN IN THE INDUSTRIAL MARKET

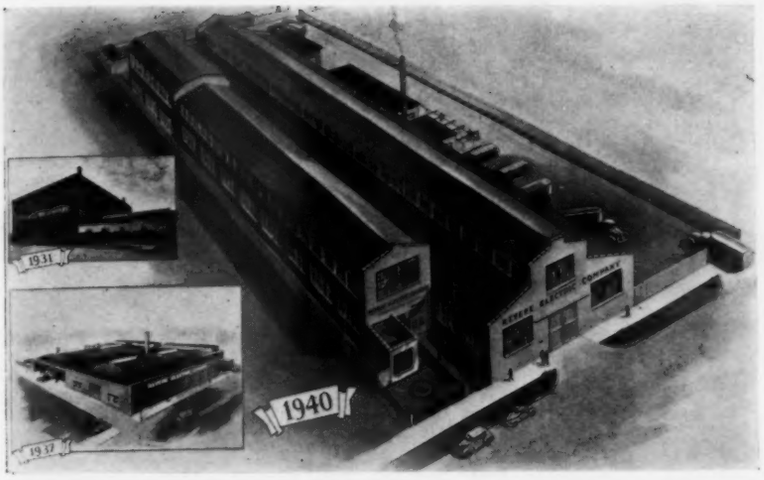
Distributor salesmen selling G-E Wiring Materials in the industrial market are able to supply electrical maintenance men and industrial electrical contractors the materials they want. Every sort of wiring material that could be needed is in the G-E line. General Electric is a leader in introducing new materials. G-E Materials are easy to install and will give long dependable service.

Moreover, General Electric has recently published a manual on modern wiring methods and materials entitled, "Adequate Wiring for Industry". By using this manual, distributor salesmen are able to make suggestions on ways to install new wiring and on modernization of old wiring that will increase plant efficiency.

Distributor salesmen who can offer all of these things are bound to be welcome in factories and in the offices of industrial contractors. Wiring Material Section, Appliance and Merchandise Department, General Electric Company, Bridgeport, Connecticut.

This publication will help distributor salesmen to make valuable modernization suggestions to their industrial customers and incidentally to sell more wiring materials.

GENERAL ELECTRIC



NEW PLANT of Revere Electric Company's manufacturing division at Paulina St. and Wellington Ave., Chicago. Buildings, yard and storage facilities occupy four acres, will take care of Revere's expanding volume. Started nine years ago on the idea of "changing night time into buying time" by brightening up service stations, the company have been forced to increase floor space nine times since then. Their first item was a patented hinged floodlight pole which simplified relamping and cleaning. Now they make all types of lighting equipment for the modern gas station.

Universal Moves

MUNCIE, IND.—To keep a step ahead of its increasing volume, The Universal Electric Co. has moved to a larger and more modern building at 301 N. High St. Containing 10,000 square feet of floor space the location has a modern office and display room, daylight motor repair shop and space for trucks to drive in for loading.

Manning Bowman appliances are a new line with the Universal salesmen and newcomers to the staff are Vernon Conyers, who is on the truck and Ethan Weir, an apprentice in the repair shop.

New Addresses

In two territories, representatives of National Electric Products Corp. and Ward Leonard Electric Co. have taken more space, thereby enabling them to carry more stocks, improve service still further. National has leased 17,500 square feet of floor space at 188-92 Walton St., N. W., Atlanta, Ga., and Ward Leonard's representative in Seattle, Wash., Northwestern Agencies, has moved to larger quarters at 2411 First Ave.

33rd Anniversary

DENVER, COL.—A few weeks ago Watts Electric Co. celebrated its 33rd Anniversary and during the years has maintained a policy of specializing solely on wiring supplies. Another interesting fact is that the firm has been in one location for 32 of its 33 years. The present owners, R. S. and J. W. Wiley, are continuing the conservative policy started by Founder B. C. Watts.

R.E.A. Activities Expanding Rural Market

Wholesalers' salesmen operating in rural territories are benefitting from R.E.A. expenditures which are making electricity available to thousands of farms. It offers a fine opportunity for wholesalers to work with contractors and dealers in selling wiring, lighting (for house, barns, yard), appliances, motors, water pumps, and electric tools.

Listed here are the places where R.E.A. lines are going up or will be started soon—

R.E.A. CONSTRUCTION APPROVED

(Oct. 25 to Jan. 4)

Town	Miles	Members	Amount
ARIZONA			
Wilcox	259	546	$195,891
ARKANSAS			
Camden	136	317	71,713
COLORADO			
Lamar	210	591	144,909
GEORGIA			
Barnesville	213	486	115,811
Cairo	94	224	48,036
Cumming	166	612	97,453
Dudley	225	708	129,077
ILLINOIS			
Dongola	161	343	124,578
Mattoon	215	461	141,238
Quincy	154	287	109,219
INDIANA			
Linden	561	1,580	394,459
Monticello	460	1,398	333,839
Sellersburg	—	643	162,927
Wanatah	189	443	127,739
Williamsport	163	485	115,862
IOWA			
Brooklyn	251	497	154,584
Cherokee	114	235	73,745
Harlan	141	272	82,210
Independence	31	61	18,499
Marshalltown	211	403	136,109
Onawa	160	297	95,458
Thompson	114	221	83,100
Woodbine	118	173	65,044
KANSAS			
Horton	90	120	53,249
KENTUCKY			
Campbellsville	36	88	23,839
Flemingsburg	158	434	101,423
Glasgow	159	342	79,789
Lawrenceville	37	132	24,628
Winchester	98	283	50,915
LOUISIANA			
Lafayette	124	292	58,044
MINNESOTA			
Granite Falls	118	203	81,229
Jackson	107	280	70,487
Litchfield	94	232	59,939
Maple Lake	139	330	96,601
St. James	85	187	56,415
Sleepy Eye	144	315	88,282
MISSISSIPPI			
Greenwood	254	1,050	124,227
MISSOURI			
Butler	114	204	69,797
MONTANA			
Hysham	69	235	91,388
NEW HAMPSHIRE			
Concord	112	318	80,094
NORTH CAROLINA			
Enfield	120	312	72,823
Forest City	280	882	156,014
Lenoir	12	110	13,039
Mocksville	135	500	92,400
Shallotte	123	360	80,223
OHIO			
Bellefontaine	153	391	91,103
Kenton	126	405	78,951
New Concord	166	582	119,833
OKLAHOMA			
Walters	117	270	65,211
PENNSYLVANIA			
Indiana	110	360	79,805
Meadville	138	522	95,210
Somerset	166	530	124,274
SOUTH CAROLINA			
Marion	152	440	86,884
Pageland	267	702	149,805
Winnsboro	150	348	88,426
TEXAS			
Colorado City	180	383	93,156
Cuero	73	148	42,308
Giddings	645	1,302	324,920
La Ward	173	435	102,777
Mercedes	144	385	76,820
Muenster	95	210	50,600
Sinton	112	236	67,012
UTAH			
Mt. Emmons	205	579	150,405
VIRGINIA			
Lovingston	59	164	46,023
VERMONT			
East Montpelier	55	140	44,384
WASHINGTON			
Spokane	160	190	120,306
WISCONSIN			
Barron	221	788	144,988
Oakdale	178	350	120,521
Westby	101	200	69,097
	10,900	28,552	7,085,159

R.E.A. ALLOTMENTS

(Dec. 9 to Jan. 17)

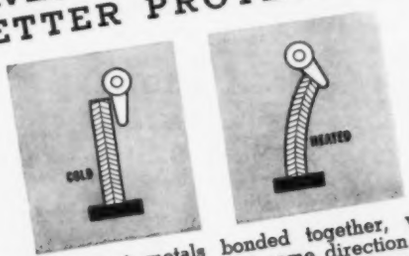
Town	Miles	Members	Amount
CALIFORNIA			
Campo	—	115	$35,000
FLORIDA			
Chiefland	116	345	96,000
INDIANA			
Brownstown	118	352	100,000
LOUISIANA			
Baton Rouge	170	565	134,000
De Ridder	115	432	106,000
MARYLAND			
Denton	50	126	43,000
MINNESOTA			
Benson	42	105	30,000
MISSISSIPPI			
Calhoun City	188	2,254	369,000
Columbus	135	1,614	279,000
Meridian	390	1,500	184,000
NEW MEXICO			
Cloudcroft	76	341	80,000
OREGON			
Willowcreek	115	347	108,000
SOUTH CAROLINA			
Winnsboro	34	71	24,000
	1,549	8,167	1,588,000

Get Bi-Metal ... and Eliminate

Ask Your Westinghouse Representative For This Bi-Metal Demonstration

Make This Test Yourself. . . . A strip of Bi-Metal and a match are all you need to prove to yourself the time and moneysaving advantages of Bi-Metal Protection. Ask your Westinghouse Representative for a Bi-Metal Demonstration Kit.

HERE'S HOW BI-METAL SAVES MONEY . . . GIVES BETTER PROTECTION



Two different metals bonded together, when heated always bend in the same direction. The heat from short circuit or continued overload currents causes the Bi-Metal, which is exactly calibrated to the job at the factory, to act and open the circuit. Because of Bi-Metal's characteristics, its accuracy never changes, regardless of the number of operations. There's nothing to replace . . . nothing to wear out.

YOU PAY NO MORE FOR BI-METAL PROTECTION IN THIS WESTINGHOUSE EQUIPMENT

LIGHTING AND POWER PANELBOARDS
Bi-Metal protects circuits and eliminates fuses. "De-ion" arc quenchers save contacts. Tamper-proof.

THERMOGUARD MOTOR
Single-phase sizes up through 2 hp. Impossible to burn out. Bi-Metal gives positive protection at all times.

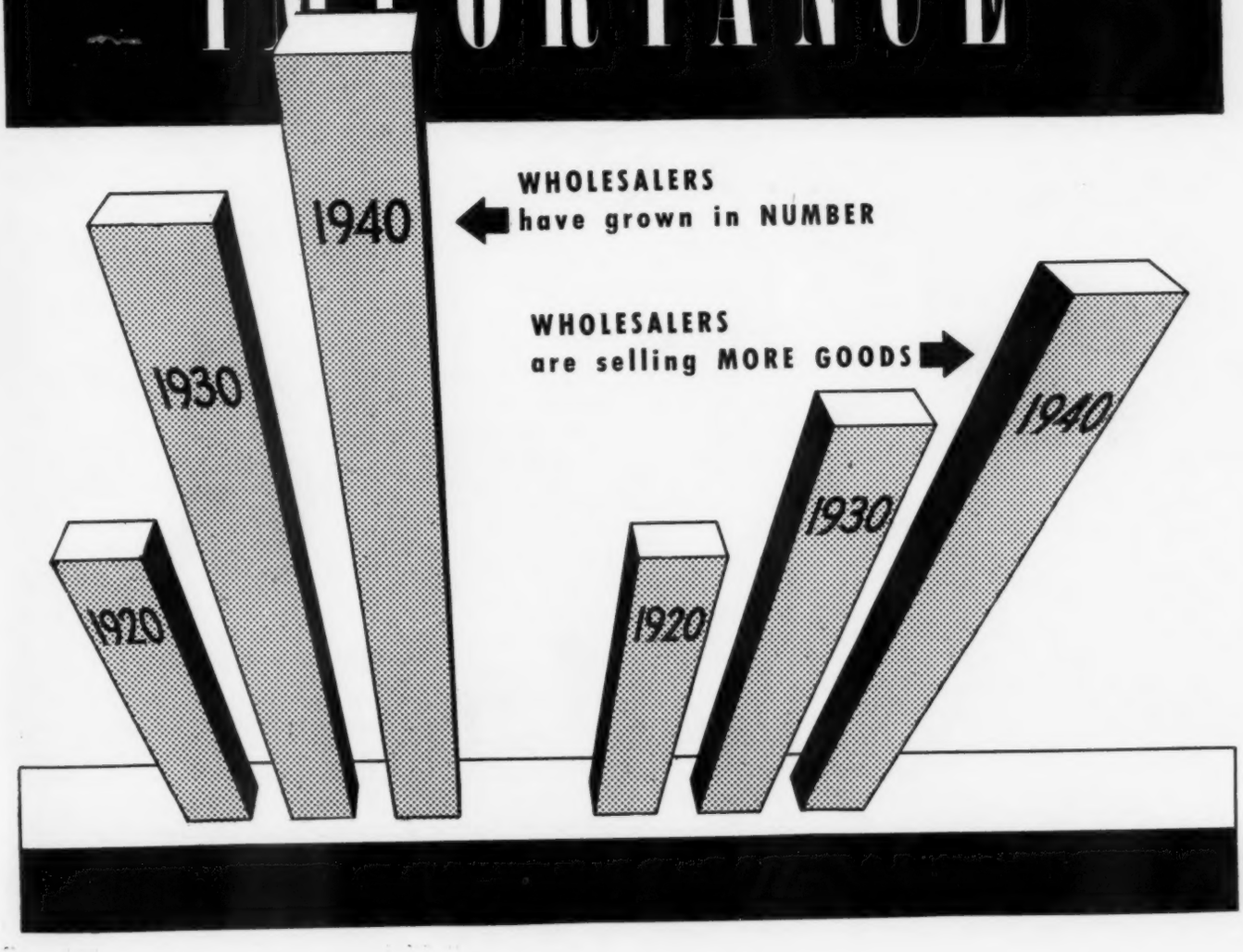
"DE-ION" MOTOR WATCHMAN
Manual motor starter for motors up to 7½ hp. Bi-Metal overload protection. "De-ion" arc quenchers. On-Off-Tripped self indicating.

Westinghouse

W
WESTINGHOUSE ELECTRIC

THE WHOLESALER'S SALESMAN

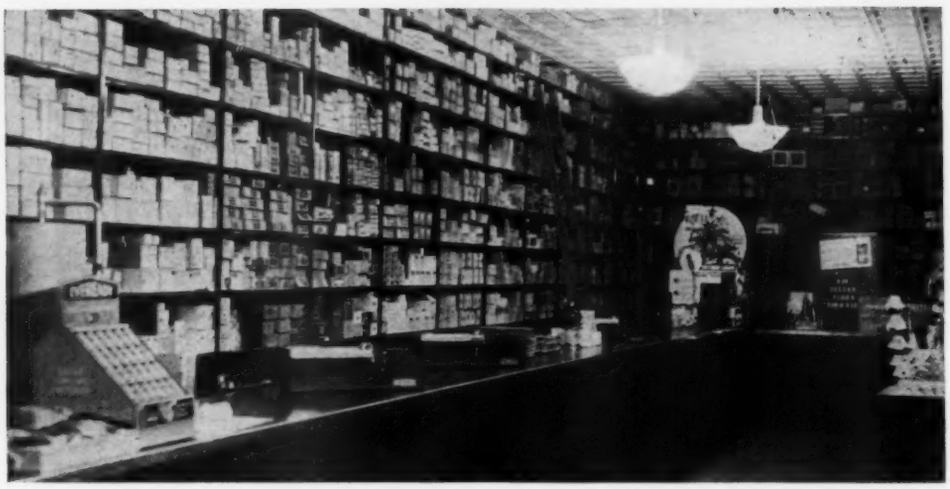
TWENTY YEARS
(1920 - 1940)
of GROWING IMPORTANCE



In 1940

MORE
WHOLESALERS do More

Thousands of items are regularly warehoused and effectively displayed by wholesalers.



TWENTY Billion Dollars worth of business done by wholesalers in 1939.—And that figure is not just a wild guess or wishful thinking! In fact, Secretary of Commerce Harry L. Hopkins says it was seven hundred millions more, or to be exact $20,700,000,000.

Of that imposing total, electrical wholesalers accounted for $829,000,000, or approximately 4%, and the electrical slice of the country's wholesale business exceeded that of hardware by $310 millions, drugs by nearly $400 millions and topped the plumbers' take by $473 million.

Those figures should dispose once and for all of that sometimes quoted fable about the electrical wholesaler being doomed, or "on the way out." In fact, when today's figures on wholesalers' sales volume and number of concerns are compared with those of twenty, or even ten years ago, they show that electrical wholesalers are very much on the way in.

One important fact points the reason for the wholesalers' continuing climb to greater importance, greater influence, steadily gaining acceptance of his indispensability as an economic necessity in modern business, namely: In functions, policies, equipment and general activities, the wholesalers have never remained static. They have changed with the times and demands of current conditions, but every change has been toward greater efficiency, better service for manufacturers as well as to customers. Yet, through the years, wholesalers have managed to cut their operating costs materially, and today are doing business on smaller margins than ever before in the history of the trade.

MORE WHOLESALERS

Speed—one of the outstanding characteristics of electricity itself—has marked the steadily growing application of electricity to industry, commerce and domestic uses, and the demand by buyers of electrical products for greater speed in getting what they want has resulted in a literal realignment of electrical wholesaling as a business.

Thirty years ago, the bulk of wholesaling operations was concentrated in the big cities. For instance, with its salesmen traveling the whole country, the old Electric Appliance Co. served the whole nation from its three houses at Chicago, San Francisco and New Orleans. Buyers were willing to wait for their orders and, with inter-city truck transportation in its infancy, waiting meant having goods come by Railway Freight unless the need for speed called for then very expensive shipment by express.

Of approximately 235 concerns then nationally recognized as electrical wholesalers, there were few that did not have salesmen covering many states, few that did not carry huge stocks, few that did not rate as star customers of the local railway freight agent.

Today there are four electrical wholesalers for every one existing in 1920. The 1940 edition of the *Wholesaler's Salesman's* directory of *verified* wholesalers will contain nearly 1,200 names of concerns actually recognized by a number of leading manufacturers as distributors. In addition, there are over 600 other concerns selling electrical goods on a so-called wholesale basis.

WHOLESALERS DO MORE

That numerical increase came as the natural result of the demand for greater speed in delivery and service on the part of buyers which paralleled the steady march toward wider use of electric current.

New, small concerns sprang up in smaller cities or trading centers. They could not often offer better prices than their competitors in the

for MORE MANUFACTURERS

big city 50, 100 or 150 miles distant, but they could offer quicker service. Old buyers liked quick service while the steadily growing army of new buyers took it for granted.

Within a decade the electrical wholesaling business became so highly localized that the old established big houses either had to establish many branches or relinquish one slice of territory after the other to the new, small, but highly alert and fast moving competitors.

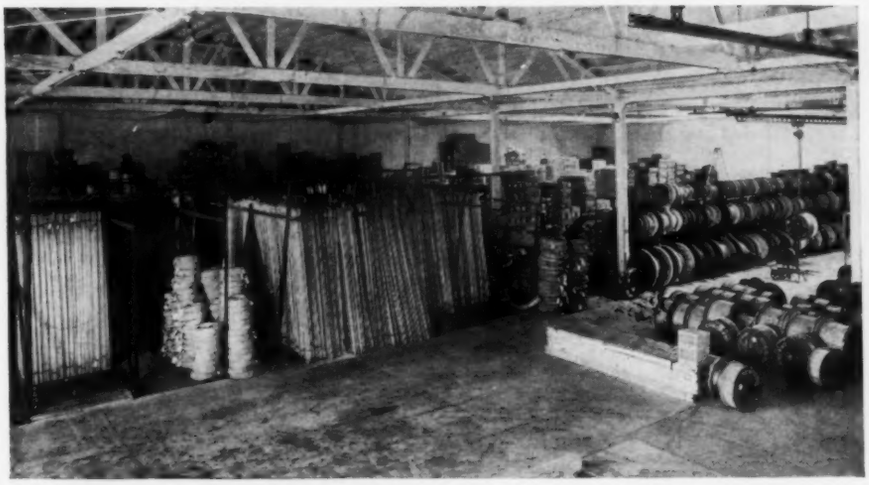
With localization, came specialization.

Every wholesaler, since he served only a comparatively small territory, could cultivate much more intimate contact with his customers. The peculiar requirements of the territory and of individual buyers could be recorded, and lines of products and sizes of stocks could be kept more effectively adapted to local needs.

Wholesalers, serving a limited area intensively, could more intelligently cooperate with manufacturers, not only in introducing new lines or new individual products, but they could serve more effectively in establishing and maintaining continuing buyers' acceptance of particular lines that they stocked.

The process of localization resulted also in more intensified sales activities by the wholesalers. With several concerns competing in a comparatively small territory, buyers are called on more frequently. Their needs are better known by the wholesaler's salesman, and the latter functions more effectively in getting his customers the kind of goods and type of service that will maintain friendly and profitable relationships.

Thus the increase in the number of wholesalers through which the business became more highly localized also provided the reason why manufacturers in steadily increasing numbers sell all or part of their products through wholesalers.



MORE MANUFACTURERS SELL THROUGH WHOLESALERS

With a larger number of wholesalers to choose from, manufacturers no longer have to play second, third or fourth fiddle to some competitor in a given territory because the only house available "pushes" the other line, but they can generally find a perfectly reliable wholesaler who is willing to "push" theirs as his No. 1 line in that field.

With more wholesalers available, manufacturers can generally find one house in each territory that is interested in having one or more of its salesmen trained by that manufacturer to make them qualify as specialists in selling, thereby providing the manufacturer with properly trained sales and service facilities at low cost.

Figures on over-all operations in the electrical industry indicate that the trend to SELL THROUGH THE WHOLESALER is well defined.

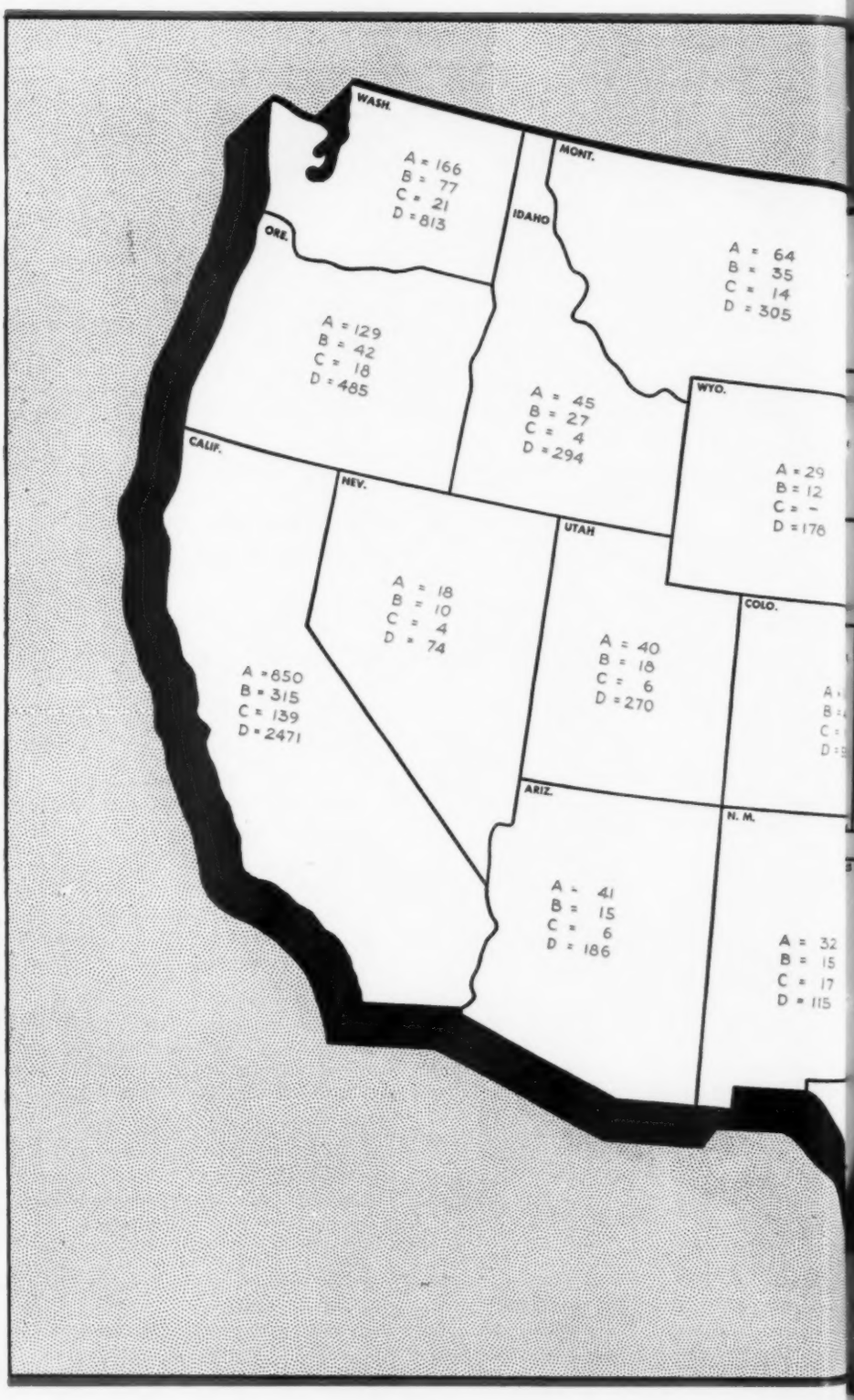
In 1926 total production of electrical products amounted to $1,600,000,000, and the total volume of business done by wholesalers in that year was $629,000,000 or approximately 39 per cent.

In 1939, with total production of electrical products estimated by *Electrical World* at $1,400,000,000, the wholesalers accounted for $829,000,000 in sales or over 55 per cent.

Thus it appears that through giving steadily more reliable and speedy service at lower cost than can be provided through other channels the electrical wholesaler has attained enviable recognition and acceptance as the most economical and efficient agent in the distribution of products of the electrical industry.

In 1940

The WHOLESALER'S CONTRACTORS ·



EXPLANATION

The figures shown in each state represent the number of concerns which, according to latest available data were engaged in business as follows:

A = Number of verified electrical contractors

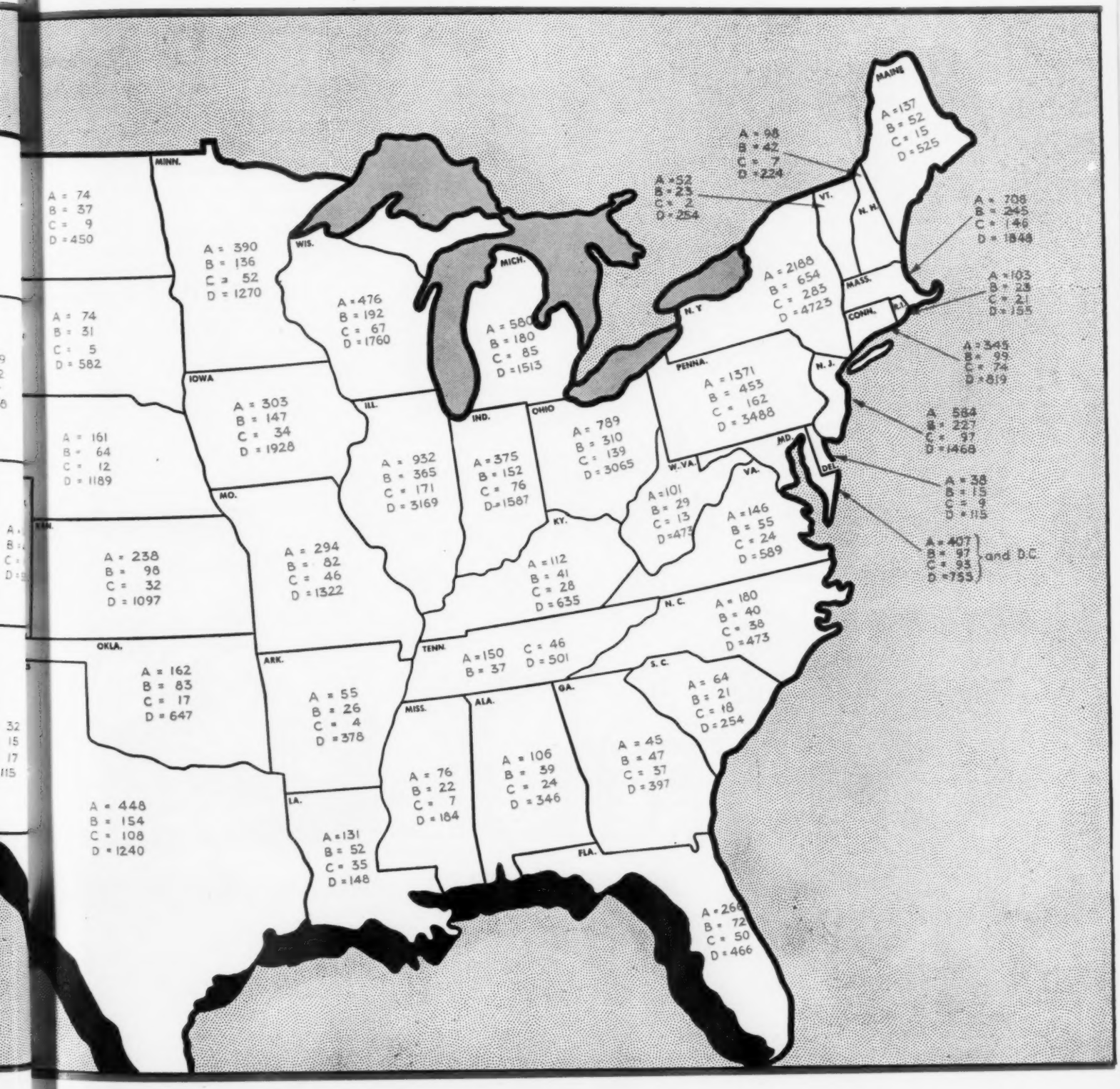
B = Number of contractors who sell motors and do motor repair work

C = Number of contractors and motor shops with annual business volume of over $20,000

D = Number of retailers selling annually more than $1,000 of electrical appliance of all kinds.

MARKET No. 1

DEALERS · MOTOR SHOPS



In 1940

Better WHOLESALES

The foregoing map shows the number of contractors, dealers and motor shops in each state. Here are ways-and-means for getting more business from these groups

THIS year, as before, the average wholesaler's salesman will get the bulk of his business from contractors, dealers and motor shops. There is an encouraging difference, though, between this and the past several years, thanks to the splendid outlook for business during 1940.

However, in good times as in bad, competition is keen for every order, consequently 1940 calls for still more aggressive selling so net profits will keep step with increased volume. As each of these markets —contractor, dealer, motor shop— offers an individual problem, each requires a different sales approach.

THE CONTRACTOR . . . There are some 15,000 electrical contractors, ranging in size from large organizations that do only industrial and heavy commercial work to the small one-man-plus operator who works from a small shop or basement and confines his efforts primarily to residential wiring.

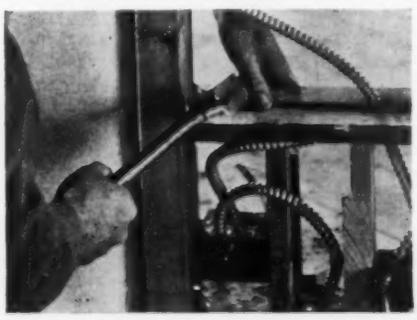
The large contractor is pretty much like the industrial plant maintaining an electrical department— they both buy and install high quality equipment and require this material promptly to avoid costly shutdowns.

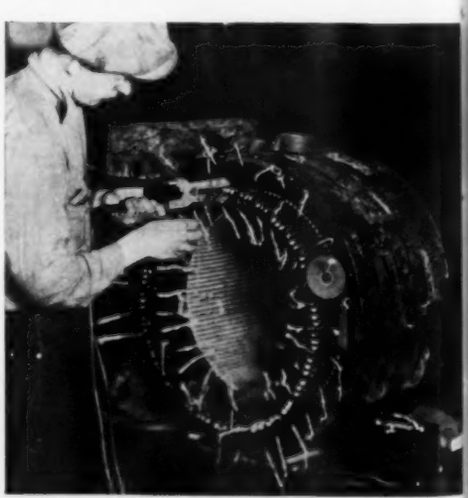
Therefore in selling the industrial contractor this speed requirement must be kept front-and-center in your mind. Certainly price is a factor, but quality and service come first. Service breaks down into several parts, beginning with selling. Although the large contractor is well qualified for handling technical engineering details, he wants to learn application features and advantages of your particular lines.

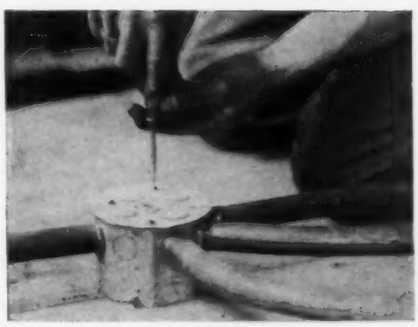
Sales calls should also be regular and consistent so the industrial contractor may expect and plan for your visit with a saving of time to both. Orders won't result every time, but psychologically it builds you and your firm a reputation as a dependable source of supply.

The obvious phase of this service is to make certain that actual deliveries go out *accurately* and *promptly*. Also, industrial contractor accounts necessarily demand extra deliveries, but that additional effort plays a most important part in securing and holding this business.

Now for a word about the smaller contractor. Naturally, starting out in a small way, he hasn't a lot of money. Still if he knows wiring, works at it, and enjoys a reputation for honesty, chances are he is going to become an important and profitable outlet.







***CONTRACTORS** are busy with new construction, rewiring, floodlighting, relighting stores. Dealers should bag a 10 per cent appliance increase. Motor shops are hustling to keep up with industry. Result—a fine year for these markets.*

SELLING to the Contractor, Dealer, Motor Shop

The curbstoner or carpet bagger is growing less in number but, where existing, also needs some help. Most of these fellows are graduate wiremen, so are primarily mechanics, not merchandisers. They need to be coached on keeping books, bidding, and selling-up jobs rather than cheapening them.

That education work is the wholesaler's responsibility as well as the local association's. This year the small operator is going to get a lot of residential, small store and rural wiring, so when he learns that he's in business to make money your orders will be larger and you will have established a loyal customer.

THE DEALER . . . There are approximately 45,000 retail outlets who sell $1,000 or more worth of electrical appliances each year. Leading this group are utilities, electrical dealers, department stores, hardware retailers. But also factors in merchandising appliances are jewelers, gift shops, independent drug stores, general stores, and in small towns anyone from the undertaker to the implement dealer is a good bet to take on and really push appliances.

In a sense, appliance merchandising is a high pressure field, calling for new ideas, new methods for dramatizing or romancing every household device. It follows, therefore, that retailers are continually looking for fresh methods to attract prospects, sell them once they are in the store.

Every successful wholesaler's salesman of appliances operates on the principle that *sales are not made until the merchandise goes out the dealer's store.*

They conduct meetings with dealer's men. They get their own or factory demonstrators to work with dealers. They help dealers with advertising. They cooperate on displays. Time permitting, they will even make calls with retailers on certain accounts. They follow through to ascertain that the dealer receives advertising material from manufacturers. Periodically they check dealer stocks to see if any line is overstocked. If so, they work up a campaign to move this stuff. And, to retain dealer good will, they fight against industrial employees getting appliances at discounts.

All in all, appliance merchandising requires work. It is obvious that, when independent merchants can sell quality, higher priced items against price-cutting competition, there is plenty of intelligent, hard selling involved.

THE MOTOR SHOP . . . This is a specialty service organization, usually operating in industrial territories, for his biggest customers are factories, mills, and machine shops. Some of them are strictly motor men, others are contractors with motor repair departments. Whatever they are, they are good markets for the wholesaler.

Why? Because this is what they do or sell; (1) repair and maintain; (2) sell new motors; (3) sell control and distribution equipment; (4) sell motor drives and supplies.

Like every other commercial business, each motor shop has strong competition, can use lots of help in getting greater and more profitable volume.

To start with, they need prospects, and this is where you can give them a hand, especially in the industrial field. It is well, therefore, for your house to team-up with some motor service shops in going after motor and equipment business.

If this isn't desirable, it is wise to tip off these repair men on jobs which might materialize by watching the newspapers, real estate news, building permits, news of fires, explosions. All of these pertaining to factories involve motor and accessory business including drives, controls, wiring materials.

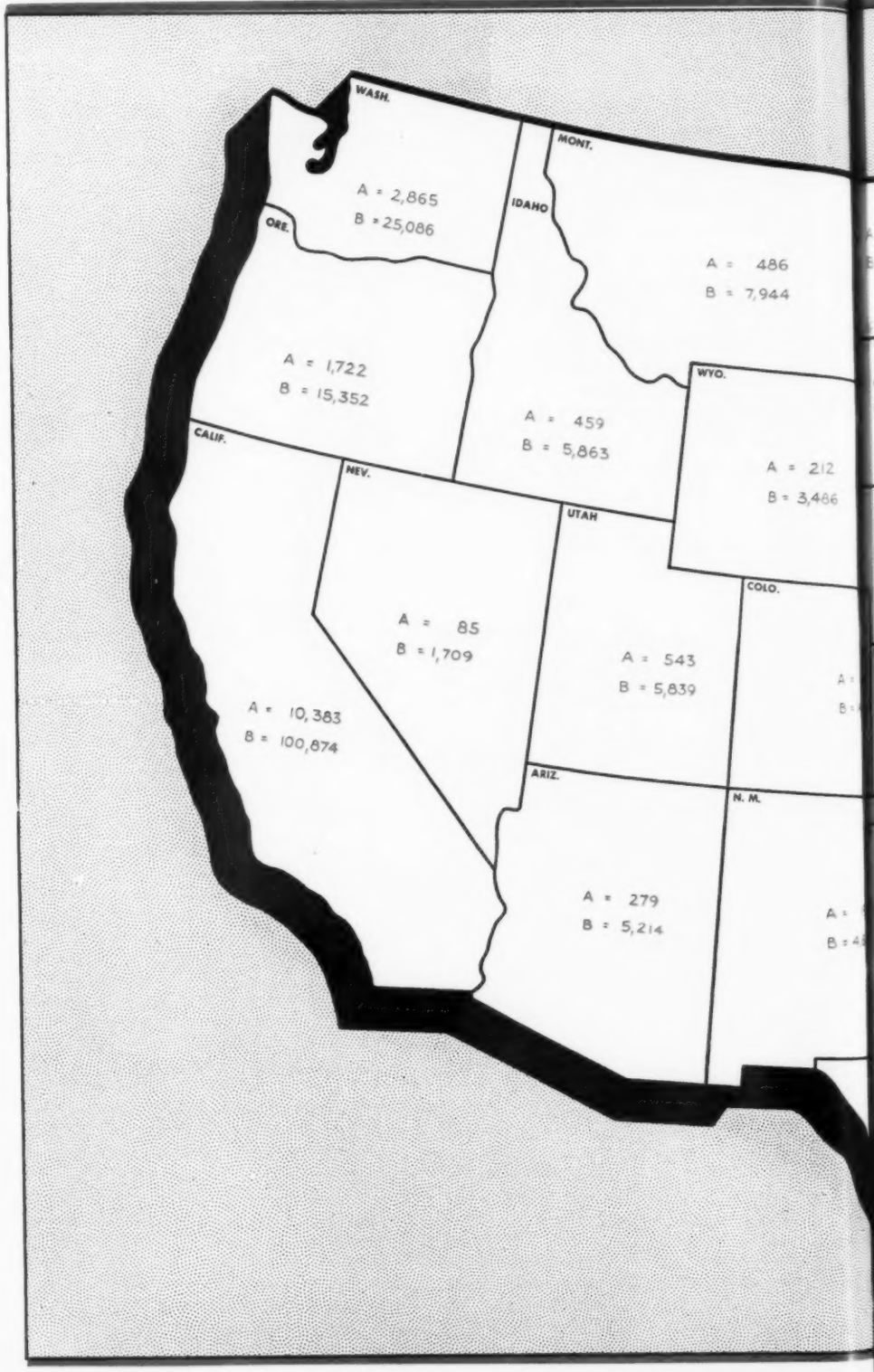
The average progressive motor shop is also advertising-conscious. Generally accepted mediums for telling their story are ads in telephone books, a series of monthly blotters with glossy backs to picture and describe briefly features (one a mailing) of the shop. Some prefer to tell the complete story in one folder. Action display booths at trade shows, scratch pads, calendars, key rings, pencils, and so forth are all methods to help the motor shop keep its name before prospects and customers; build for increased business this year.

Giving the motor shop man help on these activities takes time, but leads to the sale of—motors, starters, switches, oil circuit breakers, belt and chain drives, motor bases and rails, wiring materials, both shop and portable testing instruments, electric tools, exhaust fans, coil spreaders, gear reducers, speed changers, cleaning solvents, tapes, tubing, mica, soldering materials, varnish, insulating papers.

Briefly summarizing these three markets, it is quite certain that their volume will be up at least 10 per cent in 1940 and that the wholesaler's salesman who contributes the best service (in all its forms) is going to enjoy greater sales and better profits this year.

In 1940

The WHOLESALER'S MA
INDUSTRIAL PLANTS and CO



EXPLANATION

Recognizing that thousands of industrial and commercial buyers fill their electrical requirements through the electrical contractor, there are other thousands that maintain electrical or maintenance departments and insist on buying from the wholesaler

The figures shown here for each state represent the number of industrial and commercial concerns that buy electrical materials, as follows:

A = Number of industrial plants

B = Number of stores and commercial buyers

PRINT IN BINDING

MARKET No. 2
COMMERCIAL BUYERS

IN 1940

Better WHOLESALE

These are sweet markets because they buy quality, pay promptly. Their needs? Fast service and electrical products to increase efficiency, improve employee working conditions

SINCE last August, most factories have steadily increased production, therefore buying. Department stores are enjoying gratifying increases in sales, many are laying plans for physical improvements. Office buildings are filling up again, and some new ones are going up in certain sections, especially down south. American travel has literally boomed, is expected to make new records in '40, so hotels are prospering. Federal loans for schools, post offices, other public buildings continue to keep public construction at a high level.

All this pleasant buzz of activity adds up to a bright outlook for the sale of electrical equipment and as practically every one of those markets consists of buyers having qualified electrical staffs, they are direct prospects for you. Then in those cases where they do not maintain electrical departments, work with the contractor in improving their electrical facilities. Either way it amounts to better sales, more profits.

As there is a difference between electrical requirements of factories on one hand and commercial buyers on the other, each group requires somewhat different selling, so we'll take them separately.

Industrial Plants

Industry is primarily interested in new electrical apparatus as a means to increased efficiency and improved employee working conditions. So plant men first have to be sold on the advantages of new ideas for accomplishing specific results. Then with the idea sold, the order for electrical equipment comes along.

Factory selling requires the contacting of several men, including the purchasing agent, chief electrician, superintendent, maintenance manager, department foremen, sometimes others, depending on operations.

In a sense the purchasing agent is key man even though he doesn't write actual specifications. Further, since he signs the orders, he places directly plenty of business on standard items in those cases where the electrician does not request a definite brand. Consequently it would be disastrous in most cases to overlook the buyer even after close contacts have been established with the various operating departments.

Industry is buying lighting, wiring, motors, paging equipment.

As industrial men are busy, it is good selling to have some new specialty, a definite line or group of associated products to talk every call. Also the sales presentation should have a bit of showmanship tied-in; not fancy stuff but at least one of the following:

Samples. The selling job carries more weight, becomes simplified when your prospect can see and try the product you are discussing. This applies to a roll of tape (and don't let it get stale in your bag), a fuse, a switch and so on through the line. Naturally lighting units can be left for a period of days or weeks to go to work and practically sell themselves. But it is hardly sound to wire up a group of motors on a trial basis. However that sort of equipment can be dramatized by:

Testimonials. Use a portfolio of actual photographs and cost figures showing installations where identical equipment has been used. On the same principle, although not quite so-near-to-home, you can also get further customer-use evidence from your various suppliers. This principle of showing actual proof of user-results is certainly one of any salesman's strongest selling tools.

Manufacturers' Men. It is good

SELLING to Industrial and Commercial Accounts

salesmanship and showmanship to have manufacturers' representatives make certain calls with you. For besides making an impression, these fellows are specialists on their respective lines and can be of considerable help in selling industrial accounts. It is also especially desirable to get their help on complicated installations.

As in the case of the industrial contractor, factory buyers are interested only in quality products and good service. The various steps of rendering this service are discussed elsewhere in this issue.

there is a good opportunity to push wiring devices, fuses, tape, wire, cord, fish tape, etc. Of course, lighting comes first in the average salesman's mind when considering this market and that is particularly logical since commercial buyers probably buy more lamps and fixtures than any other group (for instance hotels alone spend about $3 million annually for bulbs), but they are also large consumers of other electrical lines.

Every one of them has a need for some sort of an intercommunicating or paging system. Most have a shop

Commercial prospects are plenty numerous in all territories.

Commercial Buyers

This large and profitable market comprises office buildings, theatres, hospitals, hotels, schools, federal, state and local governments having electrical departments. On new construction, an electrical contractor usually does the work, so he is your outlet for conduit, switches, etc.

However when it comes to maintenance or minor changes, and they go on more or less continually, down in the basement and that means tool business—hand tools and electrically powered drills, grinders, buffers.

Hospitals buy sun lamps, vibrators, therapeutic lamps, hair driers, shavers, water coolers, radios and equipment for the kitchen including ranges, refrigerators, toasters, coffee makers, waffle irons, etc.

These commercial buyers should also be on the prospect list for both floor and hand type vacuum cleaners, floor waxers, polishers and scrubbers. Obviously they constantly buy other electrical equipment in addition to lighting.

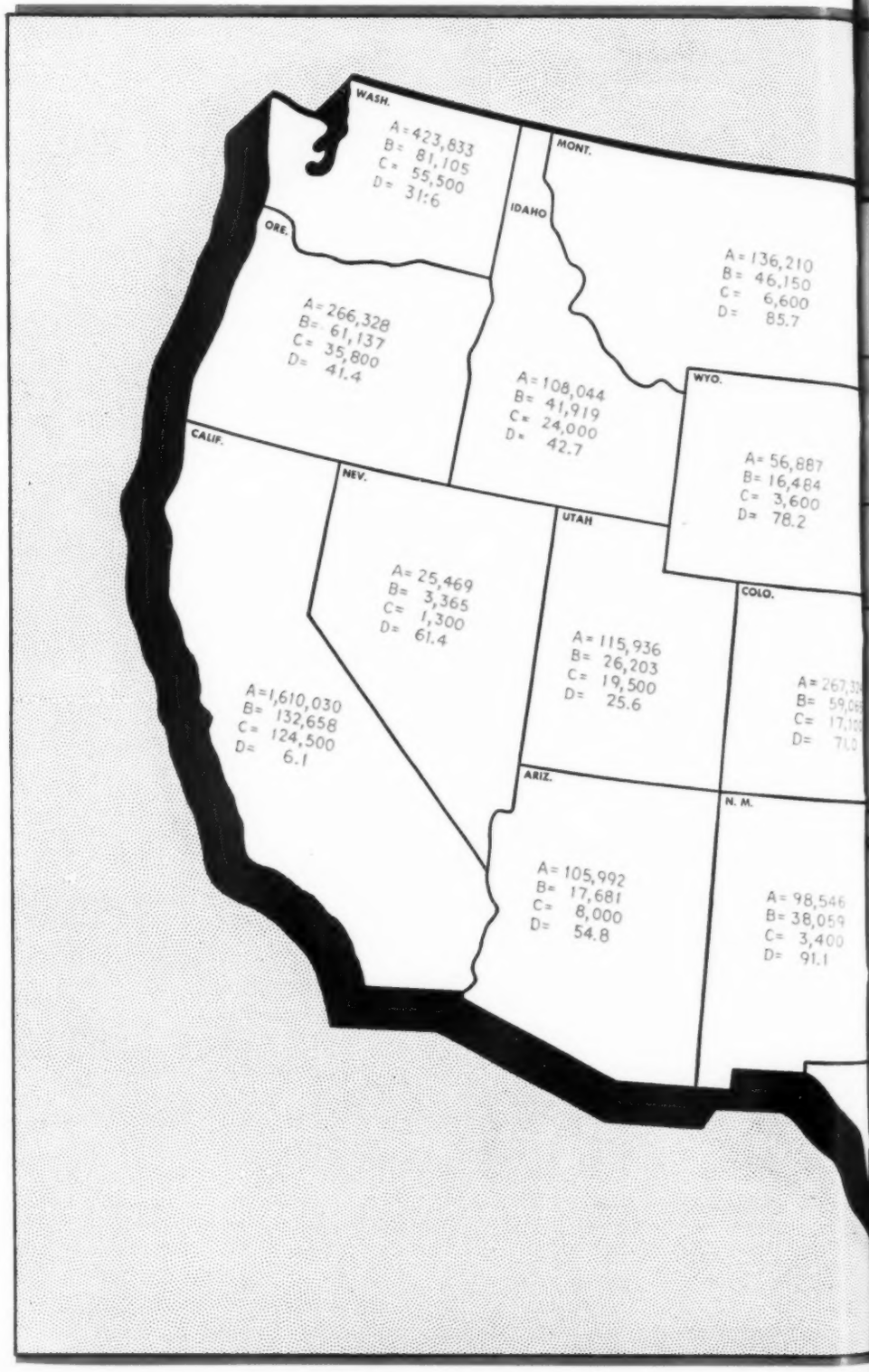
That, then, is the commercial field. Selling it is somewhat like tapping the industrial market in that product-selling should give way to idea-selling. For instance lighting has to be sold as a means to better sales in a store. In an office it enables stenographers and clerks to work easier and faster, with less fatigue and eyestrain. Naturally the better appearance of modern fixtures is also an important sales point. The same principle holds true in merchandising lighting to the school market, with even greater emphasis on the human interest side.

Concerns qualifying as commercial buyers usually have central buying departments, and as in dealing with industrials, the buyer must be the first man to cultivate. From there on it is a case of selling the superintendent or general manager, and various department heads. As these groups buy materials for their own consumption, they also require quality. They, too, expect prompt delivery service, but their needs can usually be anticipated beforehand, so delivery service isn't quite the factor it is in dealing with industry, where production lines are involved.

Main point to keep in mind regarding industrial and commercial buyers, is that it takes an entering wedge to get started. Lighting is one of the best, for it can be easily and effectively dramatized. What's more the light meter definitely proves that new, improved units are superior. And the wholesaler's salesman who studies illumination, qualifies as an expert, and not only is best equipped to get this business, but holds first position to bag orders for his other lines.

In 1940

The WHOLESALER'S M
ELECTRIFYING the AM



EXPLANATION

Many wholesalers and salesmen fail to recognize that their future sales volume and profit is definitely determined by the speed with which better appreciation of what electricity can do is taught to the American public.

National campaigns, such as those for Adequate Wiring and the Better Light-Better Sight drive increase public consciousness BUT—to turn those campaigns into more business is the job of the wholesalers and their salesmen.

Contractors need to be guided, so that they will tell their customers honestly what a good wiring job demands, what adequacy and safety means in house wiring, what more copper, more outlets, more appliances will do toward full enjoyment of electrical service.

In millions of American homes, electricity is not yet available. Almost all the homes that are wired need either re-wiring or more outlets. Every wholesaler's salesman can build more business for himself by helping his customers get more jobs—electrifying American homes.

The figures shown in each state represent the number of families, rural homes, electrified farms and farms still without electricity, taken from latest available data as follows:

A= Number of families as reported in 1930 U. S. Census. (It is estimated that the 1940 census will show an increase of approximately 10 per cent)

B= Number of occupied farms. (U. S. Department of Agriculture 1935)

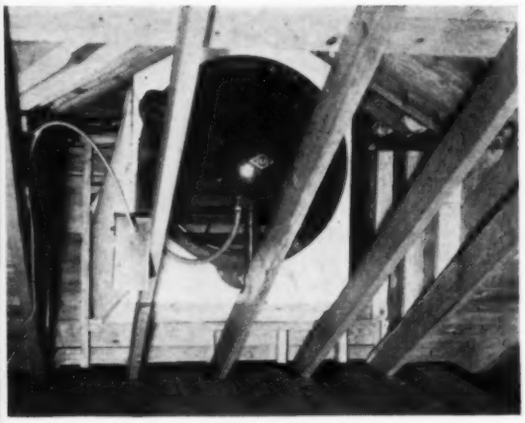
C= Number of farms receiving electric service as of December 31, 1939. (Edison Electric Institute)

D= Percentage of farms still remaining to be electrified

SMARKET No. 3
eAMERICAN HOME

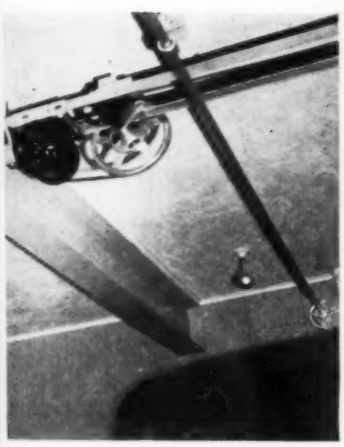
IN 1940

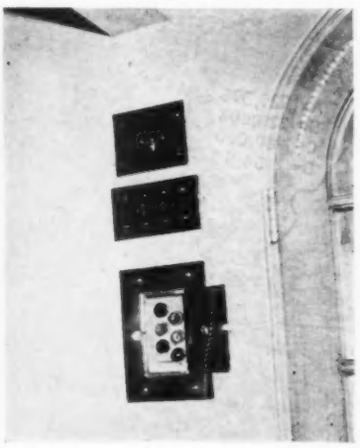
Better WHOLESALE S



Attic fan sales in '39 topped '38 by about 50 per cent. This product is a "natural" everywhere.

With the public becoming more electrical-conscious every day, appliance sales continue to mount. What's more, the range, roaster, refrigerator, mixer, coffee maker, toaster and other accessories make cooking easier, cooler—so they're selling.





The modern garage should have doors electrically controlled. Also it needs good lighting, plenty of outlets.—Ever try to find a house number at night?—Also a lighted doorway is a necessity.—Plenty of circuits with the fuse boxes or circuit breakers readily available are "musts" today. Contractors should be urged to install sufficiently heavy entrance switches.

Bedrooms require various types of lighting, including night lights, radios, clocks.

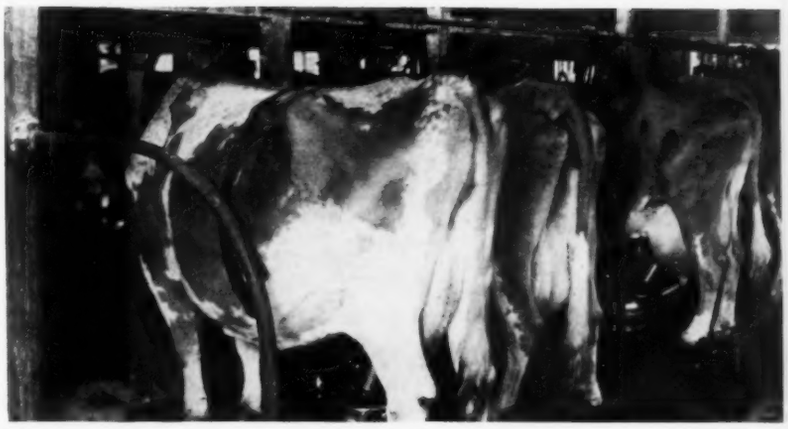
In The City—

Last year 550,000 new residential customers were added to electric power lines. Conservative predictions point to a still higher figure during '40, thus bringing an immediate and new market for construction materials, lighting, appliances, chimes, intercommunicating systems, and various specialties—all wholesaler items.

Better and more constructive selling with your contractors and dealers will assure wiring, lighting, and appliance *adequacy* in those homes. Adequacy, in turn, brings additional orders for larger wire, more wiring devices, heavier control equipment, better quality lighting and appliances. It's the means to the big idea—better profits.

E SELLING Gets MORE Consumer Dollars

Physically speaking, chickens are pretty temperamental. Sterilizing lamps prevent disease. Controlled lighting in laying rooms steps up egg production.



First, the cow barn should be well lighted. Hand milking is giving way to machine milking. Electric refrigeration maintains the milk at the right temperature.

Lighting comes first when the farm is electrified.—The farm wife is no different from her city cousin. She wants and is buying radios, clocks, and many time-saving appliances.—Her husband is going to buy a water pump because plenty of fresh water means healthier stock. Of course he'll light the barnyard and buildings.

On The Farm—

Fastest growing field in the electrical scene is the rural market. At turn of the year, according to *Electrical World*, 1,800,000 farms were electrified. Of these 1,400,000 get juice from private utilities; 400,000 from R.E.A. lines stretched almost 180,000 miles. For R.E.A. that is a boost from 1938's total of 176,000 customers.

Aided by better selling and wholesaler's salesmen, independent contractors and dealers are cracking this important market. High pressure is taboo because farmers themselves are cautious in their buying, dislike ballyhoo. When they sign the order, however, it is usually for good stuff because they need dependable service.

Contractors and dealers should push electric motors, grinders, other tools.

Men Who MADE Wholesaling History

1920-1940

Aaron, P. J., March 1931
Aitken, David, June 1931
Aitken, James, May 1932
Albee, C. H., April 1932
Alexander, Earle, October 1923
Allen, Harry W., February 1935
Andrae, H. P., March 1928
Anixter, Arthur N., April 1939
Averill, F. N., November 1922
Avery, Oscar, October 1920
Bach, C. R., December 1931
Baitinger, H. J., September 1931
Beller, Robert, April 1935
Bernardin, Frank M., September 1920
Bibbins, Tracey E., June 1922
Bickford, W. I., March 1921
Blue, Walter S., May 1927
Brown, Norman S., January 1928
Browne, Charles Edward, December 1923
Brown, Harry A., December 1938
Brown, P. T., September 1936
Buchanan, J. L., November 1923
Buehn, Louis, March 1932
Burns, John H., April 1921
Byrne, Harry, September 1927
Cabell, T. B., July 1929
Calahan, H. C., January 1938
Churchill, C. R., October 1921
Clarke, Harry C., March 1939
Coghlin, J. P., January 1929
Cole, Arthur J., June 1921
Colwell, J. I., April 1937
Cooper, John J., April 1924
Cullinan, G. E., November 1924
Czech, Henry, August 1938
Davis, J. F., December 1930
DeLano, R., October 1928
Downing, H. C., July 1925
Downs, B. B., August 1923
Drury, Walter J., November 1934
Duncan, J. A., May 1928
Dunn, J. B., September 1938
Dupont, J. C., Jr., February 1938
Durin, A. E., August 1930
Eiseman, F. R., April 1927
Elliott, Frank R., February 1940
Esler, Henry A., February 1928
Farr, William, Sr., February 1927
Fife, D. L., May 1931
Finley, C. W., September 1937
Fisher, J. H., November 1939
Flannery, W. J., March 1930
Ford, D. E., June 1934
Foreman, Hugh Q., December 1922
Frankenbush, Otto, October 1938
Front, S. S., December 1935
Fullerton, F. W. L., January 1926
Gambill, Ben S., June 1937
Garron, L. V., November 1921
Gilham, P. C., September 1929
Gleason, John H., November 1938
Goldman, N. C., February 1939
Goodell, H. N., November 1926
Graham, Allan S., September 1930
Graham, E. C., July 1921
Greene, Ira E., March 1934
Green, M. T., August 1929
Gross, Benjamin, July 1934
Gundlach, H. J., May 1929
Hall, C. B., September 1922
Hall, Melville B., December 1934
Hall, Sam L., July 1937
Hallstrom, Alfred, June 1939
Hammond, T. S., Gen., September 1934
Hardey, Edwin F., December 1926
Hare, B. T., July 1935
Harper, H. L., February 1936
Harris, David, July 1926
Hartley, Ross, January 1927
Harvey, N. G., November 1920
Hawley, C. B., September 1923
Hayes, M. J., August 1928
Hearl, A. F., March 1929
Henzel, G. W., December 1936
Herstein, W. R., May 1920
Hill, C. Phillips, March 1927
Hillis, C. C., January 1922
Hirsch, Leo L., August 1924
Hoagland, Walter, May 1925
Hobson, Harry E., March 1926
Hogan, W. M., December 1929
Hughes, D. A., October 1931
Jackson, H. L., November 1937
Jankelson, Marvin H., August 1936

Men You Should Know
W. W. Low, President Electric Appliance Co.

W. W. Low received the first citation — February, 1920

Certain individuals have given much time and thought to serve the general good. To cite these men has been the chief purpose of the "Men You Should Know" series in *Wholesaler's Salesman*. Following are those who have been so cited.

F. R. Elliott is cited in this issue —February, 1940

Jockers, W. J., June 1927
Johannasen, J. G., December 1921
Johnson, Claude W., December 1928
Johnston, George W., July 1922
Jones, E. A., May 1937
Kahn, A. H., May 1936
Keatley, E. M., October 1926
Ketcham, Frank A., February 1923
Kiefer, Walter R., June 1935
Kimmel, Joseph S., August 1935
Kline, J. L., June 1929
Klose, Lucille S., February 1937
Kranzer, William J., December 1924
Kubec, August, May 1938
Kurzon, Joseph, November 1930
Lafferty, Fred G., February 1924
Laird, R. M., June 1924
Latham, E. B., December 1925
Latham, Leslie E., October 1934
Lawrence, F. D., September 1924
Litscher, C. J., September 1926
Little, A. M., November 1931
Loeb, Arthur E., December 1939
Love, William J., January 1935
Low, W. W., February 1920
McCaffery, Joseph J., October 1935
McCullough, W. T., October 1929
McDonald, R. S., August 1937
McGivern, A. J., February 1931
McGraw, Max, February 1925
McKinlock, George A., August 1921
McNamara, J. C., November 1935
Marker, Van N., May 1926
Matthews, Claude G., April 1931
Meagher, Leo, September 1939
Methot, Clarke H., April 1930
Milner, George S., April 1922
Milnor, L. T., January 1932
Moock, P. E., August 1922
Morris, F. R., November 1925
Nagel, W. G., November 1927
Nebelthau, Harry W., April 1926
Nelson, C. B., March 1936
Newman, Martin, July 1931
Nichols, M. W., May 1935
Nicoll, Alfred H., October 1937
Oblinger, R. P., April 1923
O'Brien, T. J., October 1930
Olsen, John R., September 1925
Overbagh, Franklin, May 1921
Parker, Robert H., October 1936
Parr, C. McKew, October 1924
Patterson, George L., March 1923
Peabody, A. D., July 1927
Perry, W. L., June 1936
Philo, Louis F., September 1928
Pierce, J. F., April 1929
Pixley, M. A., March 1925
Porter, George H., December 1920
Price, Frank S., May 1923
Reichardt, H. F., April 1938
Reid, Luther E., February 1929
Re Qua, William A., August 1925
Ridinger, C. W., October 1922
Roberts, Roy R., July 1928
Robertson, W. E., July 1920
Roseth, H. D., September 1935
Rosenthal, Sam, March 1935
Rost, O. Fred., March 1922
Rumsey, Eugene A., September 1921
Russell, C. D., November 1936
Sackett, H. I., June 1930
Sager, Joseph E., April 1928
Saladine, J. W., March 1938
Satterlee, W. B., March 1924
Schmid, Titus B., January 1934
Schmidtbauer, J. C., March 1920
Schwab, L. A., August 1926
Scott, Charles P., February 1926
Shaw, John S., January 1939
Shivers, L. L., June 1923
Shumaker, Frank H., June 1928
Simon, Robert L., April 1934
Sisskind, Louis, August 1927
Sprague, Starbuck, January 1931
Spurr, Joseph R., January 1924
Steiner, George S., December 1937
Stephenson, Walter E., July 1939
Stern, Francis E., May 1934
Stern, Percival, February 1922
Stewart, Frank H., August 1920
Stubbs, O. B., December 1927
Sweeney, John E., August 1931
Tafel, Paul, April 1925
Taradash, M. C., January 1937
Terry, J. B., May 1924
Thielscher, Karl L., July 1938
Thomas, H. F., January 1921
Todd, John D., January 1925
Tolles, E. Donald, November 1928
Townsend, Thomas L., April 1920
Treadway, T. C., April 1936
Treadway, W. A., February 1932
Trilling, David M., February 1934
Trump, C. Norman, July 1936
Tully, H. H., January 1936
Van Valkenburgh, R. W., October 1925
Van Winkle, F. D., February 1921
Vilett, W. H., January 1930
Walker, C. S., June 1920
Walker, Henry L., November 1929
Ward, Sidney G., January 1940
Weinreb, Charles, June 1938
Weir, G. V., August 1939
West, Paul O., October 1939
Wetmore, V. C. Bruce, July 1923
Wheeler, Clarence, January 1923
Wilson, C. H., July 1930
Wiebe, Fred A., August 1934
Wolf, Martin J., October 1927
Woodhouse, Jonathan, May 1930
Worthington, H. R., July 1924

Through The YEARS W

J. G. Johannesen, Chairman

E. Donald Tolles, Managing Director

Dana T. Ackerly, Counsel

IN December of 1908 the late Franklin Overbagh, the late Albert H. Elliot and Thomas M Debevoise met with 66 electrical jobbers in a hotel at Niagara Falls, Canada, officially launched the Electrical Supply Jobbers Association, forerunner of the present National Electrical Wholesalers Association.

Several of those jobbers had felt a definite need for such an organization as early as 1898, in fact that year a group of midwesterners gathered in Chicago's Great Northern Hotel and formed the Electrical Supply Dealers Association. But not being national in scope and lacking harmonious direction of effort it dissolved a few years later.

However the men who met in that Niagara Falls hotel back in 1908 represented a broad section of the country and were determined to go places. One of the first things they put into the records was their objective—

"To promote the welfare of its members; to aid in bringing about friendly relations with others in the electrical business; to assist in standardizing and marketing high grade electrical merchandise."

Conservative, but at the same time highly progressive, the national association has gone forward with its original objective unchanged, its constitution intact. During the years its membership has grown from 66 to the present 487 and, what's more, NEWA members hail from every important marketing center and from practically every state, thus making it in fact a real *national* association.

Franklin Overbagh, chairman at the first meeting, continued with the association as general secretary until 1927 when he resigned. E. Donald Tolles was appointed to succeed him, has been managing director ever since. Albert H. Elliot, original secretary, held that position in the Pacific Division until his death last month. Thomas M. Debevoise was counsel from 1908 until 1924 when he retired. Dana T. Ackerly, present counsel took over that year. Alfred Byers, who affiliated with the organization in 1930 as assistant to the managing director, was promoted to secretary in 1936.

Those are the men who have comprised the headquarter's staff. It was not until 1927 that the membership decided to elect a chairman of the executive committee. Meeting in May of that year at White Sulphur Springs they elected George E. Cullinan of Graybar to that position. He served three years and then B. W. Clark of Westinghouse Supply took over the chairmanship. Succeeding chairmen since Mr. Clark have been Walter Drury of Graybar; Fred R. Eiseman of Revere Electric, Chicago; L. E. Latham of E. B. Latham & Co., New York; and J. G. Johannesen of General Electric Supply, now serving his second term.

As the electrical industry was still in its infancy in 1908, many changes have taken place during its growing-up period—such changes and innovations as new wiring methods; continually improved light sources; constantly increasing numbers of different appliances; rural electrification; radio and television.

Naturally distribution also has gone through various stages of evolution during those years and NEWA has streamlined itself from time to time to keep abreast of progress.

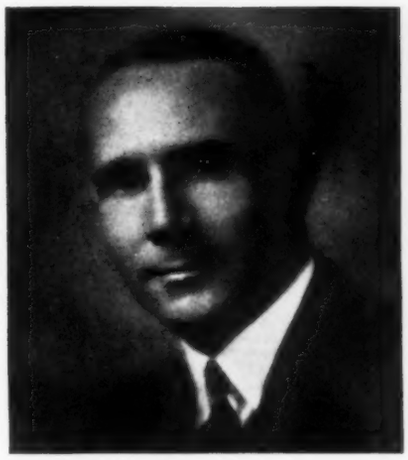
Back in 1911, for instance, seven committees — Executive, Finance, Auditing, Donation and Contribution, Freight and Classification, Manufacturer, and Public Utility—seemed quite ample to carry on the various activities of the association.

Now in 1940 NEWA has thirty committees, nineteen of them dealing solely with the problems involved in the distribution of specific commodities. Even a digest of what this association has accomplished could not be presented here, due to limitations of space, however just

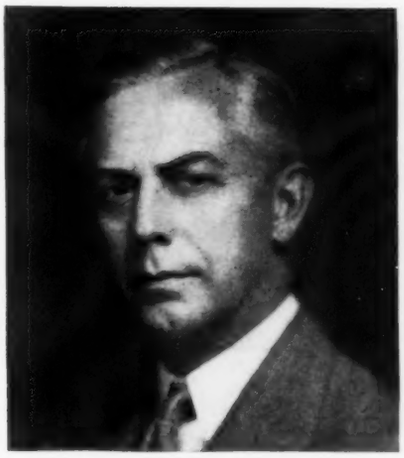
With NEWA

★ **Since 1908, or from Roosevelt I to Roosevelt II, NEWA has grown steadily in size and influence, always working for the best interests of the industry**

D. L. Fife, Vice-Chairman



H. J. Baitinger, Chmn., Atlantic Div.



E. A. Hawkins, Chmn., Central Div.

a few highlights of its busy career show what has been done, indicate what may be expected in the future:

1909—First lamp committee
1915—Auditor studied members' operating costs
1918—War service committee
1919—$40,000 publicity campaign
1922—Code of Ethics adopted
1923—Simplification of lines of electrical products in cooperation with Department of Commerce
1927—Constructive salesmanship correspondence course conducted with 2076 students enrolled
1928—Study of distribution costs in cooperation with Department of Commerce
Changed name to National Electrical Wholesalers Association
1929—Committee structure revamped
1930—Manufacturer - Distributor conferences inaugurated
Trade practice conference authorized by Federal Trade Commission
1931—Budgetary control survey made in cooperation with Metropolitan Life Insurance Co.
1932—Central station merchandising survey
Declaration of wholesaler's position in the industry drafted and adopted
Trade practice rules adopted
1933—N.R.A. activities and electrical wholesalers defined in code
1937—Operating cost committee made extensive study
1938—Revised suggested accounting manual
1939—Revised by-laws to permit specialty appliance distributors into the association

While these were some of its outstanding accomplishments, the fact that NEWA has steadily increased its membership must be ascribed more particularly to the continuous day-to-day, year-after-year efforts toward betterment of the industry that are carried forward by its officers, committees and the staff at headquarters. The present figure—487 members—is the highest in NEWA history and while numbers alone do not make a successful organization, it is a well known fact that NEWA members are active, they take their membership seriously. At the convention in Cincinnati last fall more than 80 per cent of the membership was represented—and that is a remarkably fine turnout.

F. C. Todt, Chmn., Pacific Div.

Alfred Byers, Secretary

MEN
you should know

F. R. ELLIOTT of Philadelphia

His principle — better business by building customers into better merchandisers.

TODAY it is considered sound advice for wholesalers to specialize and concentrate more intensively on building their contractors and dealers into better and more profitable merchandisers. However, there is nothing new about it to Frank R. Elliott, president of Elliott-Lewis Electrical Company, Philadelphia. In fact he and his close associate, T. Harry Lewis, realized that this was one of a wholesaler's chief functions soon after they opened house in November of 1905.

As Mr. Elliott then sized up the situation, they could get more volume, loyalty and cooperation from customers only through helping these customers with their daily problems, and not simply by asking, "Want anything today?" Upon that then farsighted idea the Elliott-Lewis sales organization continues to build its policy today.

In line with the practice of aiding customers with their merchandising problems, as early as 1912, Elliott-Lewis headquarters published a house organ to augment sales calls, thereby providing additional information regarding new sales and display ideas, product developments, price changes and that sort of thing. Consequently the company's present promotion activities have some valuable experiences to draw upon.

At that time it was the exceptional jobber who paid much attention to the appliance field, as the majority felt there was sufficient volume and profit in construction materials and lighting. But Frank Elliott was one of the exceptions, and from the beginning was keenly interested in pushing household equipment.

For instance, his organization had a front seat on the bandwagon when the Bluebird washer was practically taking the country by storm. And it was through Elliott-Lewis and their dealers that many Philadelphia housewives had Bluebird washers working in their basements. That case was quite typical, too, because Elliott has always enjoyed pioneering, as the added profits and enjoyment of accomplishment compensate for the extra work and risk.

During the years, increased activities both in construction materials and appliance lines have forced the organization to move into larger quarters three times, create a subsidiary.

The second distributing company became necessary through the unusually good sales job done on oil burners. In 1932 their volume grew to such an extent that a specialty organization was needed to handle the business. Mr. Lewis took over the management, built it into one of the world's largest oil burner distributorships within a period of five years.

Always an industry worker, Frank Elliott has belonged to NEWA and the Electric Association of Philadelphia for a long time. He served on the Board of the Philadelphia group during '30, '31, and '32, also held the vice presidency the last two of those years.

In just one sense, Frank Elliott is a stand-patter. He has remained in one town, one industry during his entire business career. From there on he's a mover. In fact what Elliott likes especially about electrical wholesaling is that it's never static, but is continually moving ahead and progressing.

Pioneer Manufacturers

Who Helped to Write

WHOLESALE HISTORY 1920-1940

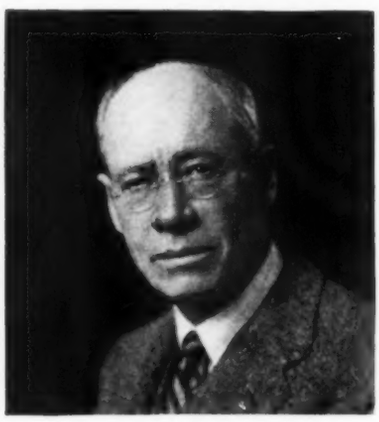
Better selling must inevitably result if salesmen know more about the concerns and the men who make what wholesalers sell. We present here the first group of a series of brief historical sketches of electrical manufacturers

They Know How to Carry Through

The story of Frank Adam Electric Co. is the story of men who carried through on whatever they tried, and who never hesitated at the height of any hurdle

DID you ever make a plumb bob on a foot powered lathe, and finish it with a hand tool? Well, Fred Adam did, and it was "some job." Perhaps it was during that early experience when he learned that a combination of energy, directed with a purpose; intelligence; and determination are the quickest way of getting to the point. He has never had time for any of the devious, indirect ways of doing business.

He is the kind of person who, when high price lost him sales on dead front lighting circuit branch panel boards, just got irritated enough to spend a holiday weekend in developing the idea of dead front panel boards made out of a moulded insulating material and in sections. A radical departure, but one which proved to be highly successful.



Fred B. Adams, president, Frank Adams Electric Co., son of the founder

A view of the modern plant.

There have been other similar cases of the Adam type of pioneering, as for instance, the "Fuslok" which prevents access to fuse connections when switch is on, the "Switchfuz" combining switching and fusing in one operation, and

the Frank Adam Major System of Pre-Selective remote control for use in theaters.

In the early 70's Jacob Blattner, turned over his business to his son, Henry Blattner and son in law, Frank Adam. At first plain electrical contracting accounted for much of the firm's business and with encouragement from the manager of the old Metropolitan Electric Light and Power Company, wiring became a major activity of the firm. The panic of 1893 was a major hurdle which the company overcame, the cyclone of 1896 was an ill wind which blew somebody good, for the rebuilding and construction work helped to recoup the position which had been threatened by the panic. As time passed, Adam found it profitable to specialize in switchboards, and eventually decided to devote all his time to that business. After several changes in location the present plant was built in 1919, and an addition followed in 1920. With those modern buildings as its headquarters, with adequate manufacturing facilities, and well equipped for research and product development, the Frank Adam Electric Co. not merely has maintained its position in the industry but led and pioneered in many important developments.

John Knell

F. R. McQuown

J. J. Madden

In 1929 they purchased the Mansfield (Ohio) Electric Hardware Co. and another major expansion move came in 1933 when they bought Roach-Appleton Mfg. Co. of South Bend, Ind.

The following year the Mansfield plant was closed and the equipment moved to South Bend and in 1936 it was found desirable to transfer the sales management and all headquarters work concerning Raco-All-Steel Products to Aurora, with James J. Madden, vice president of Roach-Appleton, as sales manager of All-Steel-Equip's electrical division.

Those progressive additions of products, manufacturing facilities and sales talent are considered in the trade as prime reasons why All-Steel-Equip has gained and maintained wide and profitable acceptance of its products among all types and sizes of buyers.

Big Business Built On Boxes

In 1911 the late C. H. Lembcke began making cutout boxes in a small frame building. In 1940 All-Steel-Equip has three plants occupying more than 200,000 sq. ft. of space.

TWENTY nine years ago C. H. Lembcke rented a small wooden building in Aurora, Ill., bought some tools and started making cutout boxes and a line of shop equipment. He found that he had struck something good, for his box business grew rapidly from the start. A year later he incorporated, the All-Steel-Equip Company, brought in some fresh capital, bought more machinery and began making switch boxes in addition to his original products.

Before many months had passed Mr. Lembcke and associates were also producing externally operated switches and distribution panels. In 1915, John Knell, now president and board chairman of All-Steel-Equip, bought an interest in the firm and that same year, A. F. Erickson, now secretary-treasurer and works manager, came into the fast growing organization. Six years later Frank R. McQuown, now vice president and general sales manager, joined with Lembcke, Knell and Erickson and under the team-work management of those men All-Steel-Equip continued to move ahead.

From 2 to 1100

Albert I. Appleton has seen the number of employees in the companies which bear his name grow from 2 to 1100

THE story of a business is occasionally the story of a man—and it is so in the case of Appleton Electric and Wisconsin Appleton Companies.

Born in Halland, Onsla, Sweden, Albert I. Appleton received his education in the schools of his native country and came to the United States as a young man. He

arrived in Chicago in 1885. Eight years later, he was Assistant Superintendent of the Chicago Fuse Co. Then years after, he established himself as a manufacturer of electrical conduit fittings and specialties and through the years as president and treasurer of the Appleton Electric Company he has become a well known figure in the electrical industry.

Founder and President—A. I. Appleton.

Starting off with only two employees, the growth to a pay roll of 1100 must be credited to the ability and the driving force of this one man, whose history is written into the progress of the companies that carry his name.

The Appleton Electric Company building located at Wellington Avenue at Paulina St., Chicago, comprises some 300,000 square feet of floor space, employs 800 people. Plant No. 2, the Wisconsin Appleton Co., is a foundry located at Milwaukee, embraces 300,000 square feet and employs 300 people.

The more than 11,000 items shown in Appleton's new catalog are used and sold throughout the world. Branch offices are located in many large cities. Resident representatives look after the interests of the company in other cities. Wholesalers everywhere handle the line. Sales agents have been appointed in practically all foreign countries.

Fifty Four Years

The history of The M. B. Austin Company in reality traces the business career of its founder M. B. Austin, star electrical salesman since 1886

THE M. B. Austin Company, with headquarters in Chicago and representatives in 15 major cities, was started in 1894 in Chicago's Monadnock Block where M. B. Austin shared one desk-for-a-man office space with Jim Pomeroy, later Austin representative in California, and Jim McGill, who later went to Valparaiso, Ind., and founded McGill Manufacturing Co. Mr. Austin didn't need much space, .though, for he was out selling most of the time, and his man of all work, A. H. Friend, now treasurer, was kept busy in the warehouse filling orders or making deliveries.

At that time Mr. Austin was representing the Safety Insulated Wire & Cable Co., a line that had been handled by his previous employer, Knapp Electric Works then in process of liquidation. Before going on his own, he had spent two years with Knapp, six years selling for Western Electric.

But one line wasn't enough to satisfy Mr. Austin, and so he added bare and weatherproof wire made by Holmes, Booth & Hayden, now part of Anaconda.

The next line was that of Safety Armorite Conduit Co., original makers of rigid conduit. By this time the company had moved to larger quarters. William A. Browne and the late Peter Taylor had joined the firm which was called M. B. Austin & Co. and that name was used until 1921 when the present one was adopted.

For many years the firm has marketed a broad line of products including wire, cable, tubing, boxes and fittings under its own brand and trade name. Mr. Browne retired in 1936 and present officers are M. B. Austin, Sr., president; M. B. Austin, Jr., vice-president and secretary; A. H. Friend, treasurer; L. J. Peckham, assistant secretary-treasurer.

M. B. Austin started his business in 1894

Now about ready to retire, "M. B." Senior is letting "M.B." Junior strut his stuff and simply makes it a point to get his hand on the rudder often enough to let the crew know that the commodore-captain still is able to steer the ship regardless of business wind or weather.

Lights In Clusters

First product of Benjamin Electric Manufacturing Company was a wireless socket cluster

LIKE the story of the bundle of sticks which, bunched together, gave each other strength, the first pioneer contribution to lighting advancement made by the Benjamin

Electric Manufacturing Company brought usable intensities of illumination to the weakness of the low candle power lamps of the day by grouping them in clusters.

Outstanding example of cluster lighting and one of the sensations of its period was the 100% use of Benjamin clusters and sockets in the passenger cars, stations and sub stations of New York's Hudson and Manhattan subway system when it opened in 1912.

Today after 28 years of experience new subway stations and cars still are Benjamin equipped because through the cluster feature high intensities of light can be produced within shallow wall and ceiling recesses—and in subway and subway car design every inch saved in height means huge savings in construction cost.

Founded in 1901, the company specialized in multiple-socket clusters and soon broadened out into the manufacture of porcelain enameled steel reflectors. Since that time it has promoted porcelain enamel as the standard of lighting practice.

Through the years Benjamin has steadily added new types of lighting equipment for commerce and industry, floodlighting, fittings and sockets, wiring devices, industrial signals, but the early market acceptance of Benjamin equipment was so definite in the lighting field that the industry thinks of the firm first of all as makers of the "engineered line" of reflectors.

Known to maintain one of the firmest distribution policies in the field, Benjamin has since inception sold through wholesalers and in all advertisements the statement appears "Sold exclusively through electrical wholesalers."

Main plant and warehouse are located at Des Plaines, Ill., with divisional offices and warehouses in New York and San Francisco.

For Complete Control of Circuits

From its beginnings, Arrow-Hart & Hegeman Electric Co. has concentrated on making control of electricity safe and convenient, yet economical.

MOVING force in the early days of the Arrow Electric Company was the Yankee inventive genius of Charles G. Perkins. Then in 1908 Edward R. Grier brought his "drive" and business judgment to the company, and it soon felt the effect of the impetus provided by his work in increased sales.

In Kansas City in 1890 the Hart & Hegeman Company was founded, moving to Hartford a year later. Gerald Hart had a flair for invention similar to that of Charles Perkins. During the years of growth, the two companies worked toward the same purpose—that of making devices for the control of the electrical circuit. Therefore it caused little stir in the industry when in 1928 officials of Arrow and H & H decided that it would be in the interest of economy and better service if the two companies were merged.

A-H & H products come from here.

The switches and other wiring devices such as plugs and sockets, now under the A-H & H name, that make and break millions of streams of current daily and broadly classified as "schedule material" are known by every engineer, contractor and contractor's helper everywhere, and they are part of the regular stock of several hundred wholesale houses.

It has been estimated that the safe and effective opening and closing of electrical circuits in household, factory, commercial and electrical appliance applications requires over 10,000 types and varieties of wiring devices, and A-H & H makes them all except the larger panel board types.

Automatic From The Start

In 1889, a Kansas City undertaker by the name of Almon B. Strowger, conceived the automatic telephone. Out of his invention came the Automatic Electric Co., Chicago.

IT began nearly 50 years ago with a single basic idea—the automatic switching of telephone lines. Today the Automatic Electric Company's activities now reach into practically the entire field of electrical communication, signaling and remote control. It's products break down into three major groups: telephones for large

systems; communicating equipment for rural territories and similar fields; private automatic exchanges for use in factories, offices, institutions, homes.

To reach this latter market, Automatic Electric turned to the electrical wholesaler several years ago, believing that the wholesaler was the logical means for doing the job thoroughly and economically. As anticipated, their distributors gave the desired results and now Automatic uses wholesalers extensively for selling these products.

The company grew out of an idea Almon B. Strowger

The old and the New—by Automatic Electric

of Kansas City had for an automatic telephone. He went to Chicago and induced some technicians and financiers to exploit his invention. They formed the Strowger Automatic Telephone Exchange (which later became Automatic Electric Company) and worked out the details. Then late in 1892 they put in their first commercial installation at LaPorte, Ind.

This first venture gave them the encouragement they needed to go ahead with Strowger's principle and from that time on it has been a case of continual improvement and expansion that has carried Automatic's telephones to all parts of the world.

Twenty-Five Years Strong

The fuses of twenty-five years ago were different but then, as now, the Bussmann Manufacturing Company put quality foremost, and continuously strives to improve its products through research.

THERE is a certain drama to the unpretentious fuse. In homes, in industry, in great skyliners, in submarines, in pleasure cars, in intricate electrical circuits, fuses are eternally on the job, safeguarding lives, property and the very heart of various operations.

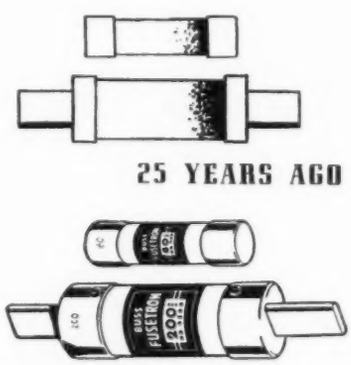
Dramatic in the same way, is the twenty-five years of history of the Bussmann Manufacturing Company. In those twenty-five years, the constant aim has been to supply the user with as good fuses as he could buy and on that policy the company has grown until today every working day's output is equal to the production for the whole year of 1915. Twenty-five years in which an organization, consisting during the first year of the officers and four employees, now counts in its ranks many who have been with the company during most of its life, 165 people who have more than ten years of service, 250 who have been there more than five years.

To every success story there is a key, and to the Bussmann story of progress perhaps the key is loyalty to high standards of quality, reliability and responsibility, geared to a constant awareness of changing conditions and an ability to meet them, to the creation of new markets with new products, to research and improvement, and to a shrewd ability to merchandise.

For instance the elimination of two soldered joints in the one-time fuse had its effect on production costs and improved fuse performance. Product research, and endless laboratory experiments developed Fustats and Fusetrons which have made a remarkable record since their introduction. Merchandising improvements, such as putting fuses in attractive cartons of five where once they were sold one at a time from bulk, increased the unit of sale, pleased the dealer and the customer.

Also during these twenty-five years, many other Buss developments have been contributed to the manufacturing and merchandising technique of fuses. *Today* the clear window and white interior make it easy to find a blown fuse. *Today* automobile fuses are packaged, not sold loose. *Today*, it is simple to renew a renewable fuse. *Today*, the Fustat makes it impossible to use over-size fuses, prevents tampering.

Throughout its twenty five years of existence Bussmann



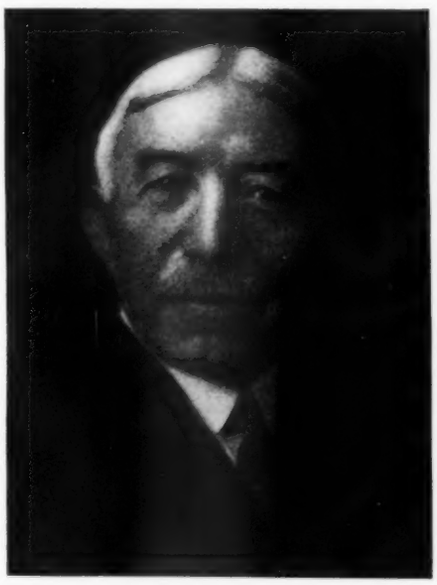
From the primitive base to the modern Fusetron in 25 years

contributed substantially to the advancement of the industry both from the production as well as merchandising standpoint while wholesalers who handle the line consider this as one of their valuable franchises.

What? Rubber Heels?

The origin of Clifton Manufacturing Co. goes back to the 80's and President Sydeman's experience dates to the days when his suggestion to use rubber heels met an astounded audience.

SOMEWHAT like the coming of the automobile necessitated something better than a wagon wheel to roll it over the ground, our industry required ways and means for keeping electricity in hand while putting it to work. So tape came into the picture to do part of that job and one of the early makers of both friction and rubber tape was Clifton Mfg. Co., Mattapan, Boston, Mass.



A. Sydeman, president.

That was more than 50 years ago. Since then Clifton has been steadily increasing production while selling its products through established wholesalers.

In 1931 the company came under the control of A. Sydeman, who as president and treasurer, actively guides its affairs today. He brought to his task a wealth of experience, for he started the manufacture of rubber products in 1886 when he opened a small factory in Stoughton, Mass. Later he operated a large rubber plant at Canton, Mass. and is still active head of other businesses at Boston, North Easton, Mass., and Granby, Quebec, Canada.

Early in his career. Mr. Sydeman figured that shoes should have rubber heels. When he first broached the idea to the shoe manufacturers they were sceptical, thought the idea too revolutionary. But it wasn't long before the rubber heel was generally accepted as it is today. And Mr. Sydeman says that he has watched rubber find hundreds of new uses, but has always interested himself particularly in its application to the electrical field.

There's More to Lighting Than Light

Effective and dramatic use of light has been the constant aim of Curtis Lighting, Inc.

EVEN in the days when the wonders of the Edison Lamp were so new that people were content to have a bare lamp hanging on a drop cord, Augustus D. Curtis realized that not only the quantity but also the quality of artificial illumination was important.

In those early days, while doing a pioneering job on using electric lights for show window displays, Mr. Curtis evolved the idea of lighting the show window like a stage, from concealed lights with reflector equipment which would direct it on the merchandise.

In 1897 he organized the National X-Ray Reflector Co., and employing Silver Mirror X-Ray Reflectors, applied the theory of controlled lighting from concealed sources not only to show windows but to installations in factories.

In 1908, when showing some pieces from his collection to a group of friends, Mr. Curtis accidentally turned the reflector of his demonstration light toward the ceiling, and

Founder A. D. Curtis . . . .

President Kenneth Curtis

the pleasant diffused illumination gave him the idea for indirect lighting fixtures which were later worked out by his Engineering Design Division.

Later the arrival of the tungsten filament lamp, with its

high glare factor, gave added impetus to indirect lighting, and in 1932 the Better Light Better Sight movement re-emphasized the importance of glareless light. Neverthless, always ahead of the procession, Curtis showed in a 20 year old Catalog the Curtis Adaptor Lamp which incorporated a reflector to conceal the light source and direct the light toward the ceiling much as these new lamps do.

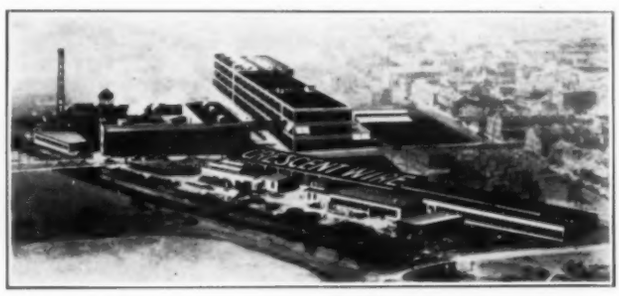
In line with the latest lighting trend—fluorescents—the company has made a wiring channel known as CurtiStrip and is announcing equipment for general fluorescent lighting which will be sold under the name SkyLux, offers unusual conveniences for easy installation.

From Rubber Plant To Steel Mill

Started as a rubber reclaiming plant, Crescent Insulated Wire and Cable Co. now includes a steel mill, makes 19 major lines of products, employs 850 people.

FAR cry as it may seem from rubber reclamation to the manufacture of wire and cable, it has been a logical step-by-step development in the case of Crescent Insulated Wire and Cable Co. of Trenton, N. J.

Actually the story of Crescent is the story of General C. Edward Murray, its president. He started in a small way and through initiative, work, intelligent planning built the company to its present size and prominence.



Today it makes 19 wire and cable products, occupies 375,000 square feet of floor space, employs 750 men, 100 women.

General Murray began reclaiming rubber in 1882, continuing that activity for nine years when the present corporation was formed and Crescent started manufacturing insulated wire. By 1895 the company was also producing mechanical rubber goods, but within ten years the wire and cable volume grew to such an extent that it was decided to dispose of the mechanical goods part of the business.

Four years later a wire drawing department was installed, adding bare wire to the line. Then in 1922 a rolling mill was constructed where steel could be drawn, rolled, and electro-galvanized. The rubber plant had begotten itself a steel mill!

By that addition all processes of the manufacture of armored wire and cable could be carried on in one plant.

To obtain continual improvement in manufacturing processes and to make certain that uniformity of product is secured in all departments, Crescent maintains extensive research facilities and a modern testing laboratory.

Progress Through Current Control

Without controls to operate equipment, the electrical industry could never advance and since early days, Cutler-Hammer has been a major producer of controlling devices

WHEN the Cutler-Hammer Manufacturing Co. (now Cutler-Hammer, Inc.) started in business in 1892, the electrical industry was extremely simple judged by today's standards. There were motors, though, and Cutler-Hammer's original contribution was manufacturing controlling devices, rheostats, and allied equipment for elec-

The Multi-Breaker is one of Cutler-Hammer's many items for controlling electricity.

tric motors. From that time on, Cutler-Hammer has remained in the control field, has pioneered many devices, one of their early ones being the face plate type starter with low voltage release magnet which is still widely used today.

Through the years the Cutler-Hammer line has been constantly improved and expanded, has included many new developments which are found in daily use controlling electrical equipment in all sorts of buildings, on ships and submarines—in fact wherever electricity is at work.

The company's sales organization has naturally kept step with production. For some years, because of the highly technical nature of motor controls and the lack of standardization in applictions, most C-H equipment was sold direct, but as greater standardization was achieved the company began selling through wholesalers to get better coverage in all markets. During the past four years sales through independent electrical wholesalers have increased tremendously, so that today Cutler-Hammer expects to increase the lines of products sold through this channel. Already such C-H lines as motor control, safety switches, service control, Multi-Breakers, electric heaters, theatre dimmers, etc., are marketed through its wholesale distributors.

And Finally— the Two-Forty

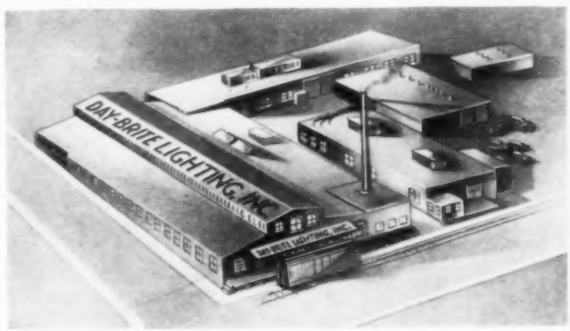
Day-Brite Lighting, Inc., long known as specialists in lighting installations, apply old experience to new lighting problems, features new fluorescent fixture.

UNTIL recently main forte of Day-Brite Lighting has been the design of specialized lighting installations. When fluorescent light reached the market in 1938, called for a new type of lighting technique, the company's experience in meeting unusual situations was put to good use in the design of this new line of unique fixtures.

Only a few months after the introduction of fluorescents, in September 1938, Day-Brite published an eight page bulletin on fluorescent lamp fixtures. Such was the interest in the new lighting that the bulletin was added to and revised in November, again in January, and in June of 1939 still another catalog devoted exclusively to fluorescent fixtures was published. That's evidence in itself of the opportunities in the field and its effect on company sales.

A room in an old two-story residence was the Day-Brite's first manufacturing plant, display lighting equipment principally for specific installations the early products. These first and later installations featured the high reflector value of porcelain enamel.

Step by step the business expanded as the company's system of distribution through leading electrical whole-



salers became effective as a sales builder. Demands for display case equipment and allied products made it necessary to maintain an electro plating department; porcelain enameled signs were made; special commercial and industrial lighting jobs of all types were handled; a staff of draftsmen and illuminating engineers was organized to handle inquiries for specialized lighting installations and design new fixtures to be added to the Day-Brite line; licensing arrangements were made whereby fixtures might be manufactured incorporating the Holophane Controlens. Latest, and perhaps most significant, happening, is the pleasing impact of fluorescent lighting upon the company's business.

Dry Type Transformers Only

By picking a line and sticking to it, Dongan Electric Manufacturing Co. has built a business

IN 1909, two young engineers bought a small business. Those young men were Gus J. Sherling and Lyle G. Hicks, their business the Dongan Electric Manufacturing Co.

They thought that they saw a glowing future in low voltage transformers, and, together with other products, they started pioneering small bell ringers to replace batteries. Old-time wholesalers will no doubt remember the early Dongan bell ringer with its cast iron case.

As time passed, they added lines of signalling, double

wound, step-down and general purpose transformers. The rapid expansion necessary to cope with the young, but hopeful transformer business caused a change in policy. It was decided to drop meter production which had been an activity of the former Dongan Instrument Company and stick exclusively to transformers—also it was agreed that the company would sell only through wholesalers except where their product was needed as part of other manufactured products.

The line expanded greatly in the early '20's—the small shop soon had grown into a sizeable plant. Then came an opportunity to help in pioneering efforts on "Neon" lights and this experience proved invaluable when fluorescent lighting came into the picture since by then the company had had fifteen years of experience in developing control apparatus for luminous tubes, or gaseous discharge tubes.

Today the Dongan line covers all types of dry transformers and a complete line of controls for fluorescent lighting.

Rigid Conduit-Rigid Policy

Through its 35 years, Enameled Metals Co., makers of Pittsburgh Standard Conduit, has maintained a wholesaler policy that has secured broad and profitable distribution.

WHEN Jno. S. Patterson, Peter McIlroy and several associates pooled some money 35 years ago and started the Enameled Metals Co., they had one basic idea. They were going to make only good products and sell them through recognized channels. Fifteen years later L. R. Quinn joined them and proceeded vigorously to develop the company business further along the same basic idea.

Today those men—President Patterson and Vice Presidents McIlroy and Quinn—are naturally proud that their business has grown to large proportions and particularly that in all buildings still standing, in which Pittsburgh Standard Conduit was used, the original complete conduit installations are still in service.

Also they are proud of the fact that their wholesaler policy has earned for them the loyal support of their growing wholesaler organization. What's more this policy has been an important factor in enabling them to reach their present position as the country's largest exclusive manufacturer of rigid conduit.

Some of the modern buildings having installations of Pittsburgh Standard Conduit are the Parkchester development in New York City of the Metropolitan Life Insurance Co.; the Metropolitan office building, New York; Supreme Court and Social Security buildings in Washington, D. C.; Pittsburgh Post Office; N. Y. C. R. R. depot in Syracuse, N. Y.; Irwin Works of Carnegie-Illinois Steel Co.; Tennessee Coal & Iron Building, Birmingham, Ala.

From Iron Plug To 1400 Items

Louis Ludwig and a helper were the staff of Eagle Electric in 1920 when they started producing iron plugs. Celebrating its Twentieth Anniversary this year, Eagle now makes 1400 items.

IN 1920, Louis Ludwig had the idea that the electrical trade would be able to sell a plug that would fit any hand iron. So he rented some space on the fifth floor of an unheated building in New York City, hired a man, and they went to work turning out plugs. From that modest start Eagle Electric Mfg. Co., Brooklyn, N. Y., has grown until now it makes some 1400 items, employs 450 people, occupies 120,000 sq. ft. of space.

In 1923 Mr. Ludwig noticed that most dealers were making their own cord sets. He decided that they would rather buy them complete, so Eagle began producing complete cord sets, put them in attractive boxes.

In 1924 Eagle introduced an iron element that would fit most of the irons then in existence and an element for replacing burned-out elements in most makes of portable electric heaters. Eagle introduced also several new products for the radio industry which began booming about that time.

These buildings are dedicated to one job-producing rigid conduit.

Under Louis Ludwig, Eagle Electric has moved far in 20 years.

During its growth Eagle has acquired several other companies including Stayhot Electric Iron Co. (hand irons); Magnus-Real Electric Co. (wiring devices); General Appliance Corp. of Cal. (flasher buttons) and took over a major portion of the line manufactured by Beaver Mfg. Co. (wiring devices). It found these acquisitions an effective and profitable short-cut to broadening its line of products and increasing its sales.

Diamond Anniversary For Faries

From One Small Machine Shop Faries Manufacturing Company Grew to Present Stature.

FARIES Manufacturing Company is typical of the American tradition of growth from humble origins. In 1880 Robert M. Faries founded the company in a small machine shop at Decatur, Illinois; today his company occupies about 1½ square blocks with railroad sidings and all the other necessary equipment.

Changing times and methods have not impeded but instead speeded this company's progress. Witness the fact that their line of merchandise has grown from a few machine parts and fittings right through the kerosene, gas, and carbon lamp stages of lighting until today Faries makes the most modern types of commercial and industrial lighting equipment.

Always right on top of new developments in the lighting field Faries took the advent of fluorescence as the signal for bringing out a whole new line of table and floor portables for offices and shops, is supporting wholesalers' sales effort through national campaign.

Faries Manufacturing Company is justly proud of its development and of its long association with national and independent electrical distributors, through whom it enjoys a steady flow of business.

Lamps for Seeing or Drying

Fostoria Pressed Steel Corp. is celebrating in 1940 the anniversary of twenty-five years dedicated to manufacture of products acceptable to industry.

ACTIVITIES of the Fostoria Pressed Steel Corp. move forward on two flanks. Its line of Localities is designed to supply industrials with efficient and economical equipment which provides necessary "Lighting for Seeing." The "Para-Sphere" reflector line is designed to supply industrials with a practical and economical means of utilizing infra-red lamps for drying and baking operations.

The line is carried by over two hundred wholesalers in the United States and Canada and nearly 7500 industrials know the products through use.

The company's plant is located at Fostoria, Ohio.

Lamp Sales Loom Large Says Nela Park

Lighting is the first objective of all electrical installations, and deserves first emphasis in selling

TO tell an electrical wholesaler that the continuous outpouring of new light sources and improvements, particularly from the G. E. lamp development laboratory at Nela Park, Cleveland, has been a distinct aid to distributors over the past two decades is like telling him that when the rain comes down the ground gets wet.

Yet it has never been emphasized enough that new developments in lighting always have a direct and profound effect upon the whole industry.

For instance, twenty years ago, when *Wholesaler's Salesman* was born there was also born a new process which removed the objectionable sharp tips from the ends of lamp bulbs. This gave electrical wholesalers a new topic to discuss with dealers. Giving 20 per cent more light than the early tungsten lamps and costing 70 per cent less, sales of the new tipless wonders boomed, and consumption of large lamps zoomed to almost 200 million annually (nearly twice that of the 1913 figure). Wholesalers' lamp business grew in direct proportion.

In 1924, when perfection of 2-filament auto headlight bulbs was announced, that immediately accelerated the wholesaler's miniature lamp sales and net receipts. News of the 2-beam headlamp had hardly cooled when this magazine heralded the discovery of a way to inside-frost Mazda lamp bulbs. Softer light. Stronger lamps. Less breakage. Simplification. Standardization. Five common lamps instead of 45! It would be difficult to translate the value of this revolutionary development into dollars saved and extra profits made by wholesalers, but they were there all right.

And so on up through the years announcements of new Nela Park developments have been frequent and their impact on the industry always has been in the direction of better light, better merchandising methods, better values for the consumer. Yet, despite all the outstanding contributions of former years, the pace of lamp developments is swifter today than ever, and all the applications of the new light sources open new fields that should turn out to be a mild form of bonanza for the alert wholesaler.

The filamentless fluorescent line Nela Park brought out in 1938 is now being bought at a rate of more than a million per year. The hermetically sealed reflector and projector lamps combining the elements of a lighting fixture for reflected controlled light all in a single unit have brought countless new sales opportunities to the wholesaler!

Just within the last 12 months Nela Park contributed to the automotive industry the Sealed Beam Headlamp, giving the user twice the amount of light on the road, less glare, and a larger unit of sale by far than the conventional headlight bulb. Finally we must add the new GE "Mighty Midget" photoflash lamp, No. 5, of which more than 2 dozen can be carried in a coat pocket at one time, and how that's going to boost flashlamp sales!

Lamp consumption annually in the United States is about to hit the billion mark. Consumption of large lamps is slightly in the lead with 540,000,000; miniature sales are close behind with 430,000,000.

Obviously the wholesaler who keeps his eyes on lamp development and the lighting world will find some new sales opportunity all the time, and, says G E Nela, lighting is never an imaginary rainbow for the wholesaler's salesman.

Sixteen In One

Sixteen earlier companies were represented in the incorporation of the General Electric Co. in 1892. Now it has 21 major plants in this country and Canada

LARGEST organization in the electrical world, General Electric Co., with 21 major plants, extends its manufacturing activities into three broad classifications which embrace every branch of the industry, viz: (1), apparatus and equipment for the generation and distribution of electricity and for its use in industry and transportation; (2), wiring materials and a complete array of appliances for the home; (3), lamps and lighting for homes, factories and highways.

That, then, briefly sums up the full scope of present activities of the company which was founded April 15, 1892, with the merger of Thomson-Houston Electric and Edison General Electric. Previously, both of those companies had been formed when several older electrical firms were consolidated. Actually the ancestry of General Electric goes back to the first days of electricity and recalls such men as Thomas A. Edison, Charles F. Brush, Elihu Thomson, Charles J. Van Depoele and Frank J. Sprague.

Since the founding of G.E. the late Dr. Charles P. Steinmetz was one of the world's great scientists who, under the G.E. banner, contributed extensively to electrical development.

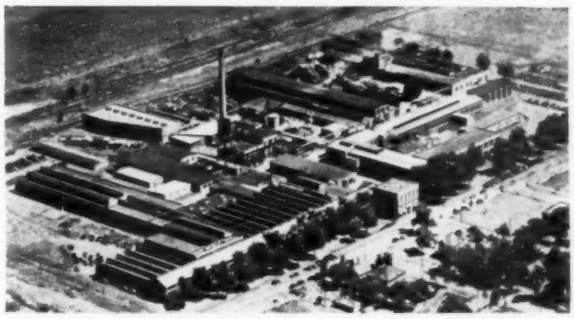
During the 48 years of existence of the present company, its management has consistently kept G.E. policies in step with current trends.

Under its first president, Charles A. Coffin, emphasis was on engineering, developing and perfecting power generating, transmitting and utilizing equipment, while the country's utility companies were registering unprece-

dented expansion in capacity, load and territory served.

When in 1922 Gerard Swope became president and Owen D. Young chairman of the board, General Electric entered what has often been called the merchandising phase of its cycle. Steps were taken to set up a permanent and country wide distribution system for G.E. products. New consumer products were developed and sold through thousands of dealers while organized publicity and advertising served to make the G. E. trademark as well known and as respected in the American home as it had been for decades in American industry.

It is expected that while the Swope-Young team resigned late in 1939, the recently elected team of Charles E. Wilson, president, and Philip D. Reed, chairman, will further consolidate the position of the company in every field it serves and carry it forward to new records of usefulness and performance.



Greenlee grew from tool shop to this.

Greenlee workers who have a year or more service, 16.7 per cent have a twenty year service record or better, the remaining 83.3 per cent have an average service record of 7½ years.

It Started with the Machine that Bores a Square Hole

First main product of Greenlee Brothers roused comment at the Philadelphia Centennial in 1876

NEAR the close of the Civil War identical twins, Robert and Ralph Greenlee, moved to Chicago from Northwestern Pennsylvania and laid the foundation for what was to become Greenlee Brothers and Co., of which Greenlee Tool Co. is the Hand Tool Division.

The business at first consisted of the sale of machinery manufactured in the East, then they started a small machine shop, then a foundry. In the beginning only simple woodworking machines were made, but in 1874 development of the hollow chisel mortiser, known as "the machine that bores a square hole" started the company's first period of growth.

Introduction of the power feeding rip saw in 1881 made Greenlee's principal products mortisers and rip saws. Heavy wood working machines and wood boring tools were later products.

A series of consolidations with other companies brought new products to the line and laid the foundation for the Greenlee Tool Co. which in 1928 was organized as the Hand Tool Division. Manufacture of Greenlee Knockout Punches and Cutters was begun, soon to be followed by a line of hydraulic conduit benders, ball-bearing joist borer, hydraulic pipe pushers and a cable puller, a line of tools which is marketed through wholesalers.

With 47 years' service to the credit of the president, 46 to the treasurer and 39 to the secretary, it is hardly surprising to find so stable an employee policy that, of the

Lighting Leads the Way

Goodrich Electric Company Believes in Improving Efficiency and Standards of Lighting Equipment

FROM the beginning of his experience in the electrical industry William M. Goodrich recognized the need for efficiency and high standards in lighting, so he left a connection of long standing to organize the Goodrich Electric Company.

William Goodrich saw a need in the lighting field.

Starting with a group of original designs and a limited line of porcelain enamel fixtures, this company has constantly developed new designs and types of lighting equipment until today it offers an exceptionally complete line to meet every demand of illumination in factories, warehouses, institutions, etc.

Steady increases in business have necessitated two moves to larger quarters, the last one made only recently, to a new plant which more than trebles its previous manufacturing capacity.

Sound, aggressive management, clear cut policies, and standard quality production have combined to place this company among the leaders in the lighting equipment field.

That Mr. Goodrich intends to keep his company there is indicated by the quantity of patents on fixtures already held, while engineers are constantly working up new ideas. Mr. Goodrich prides himself on the fact that his company is a charter member of the RLM Standards Institute.

Sold—Six Million in Ten Years

Keyed to the demands of the market of its period, the Brascolite of World War days built real sales totals. Edwin F. Guth Company believes the new Brascolite outperforms its predecessor.

KEYSTONE of the sales structure of the Edwin F. Guth company is the ability to design fixtures which combine eye appeal with excellent lighting performance.

Head Man Edwin F. Guth and a good friend.

Outstanding example of that was the old Brascolite which sold in huge quantities both here and abroad.

Edwin F. Guth, founder and president is the dynamo that generates most of the new sales and engineering ideas and designs put out by the company.

Since 1902, Guth has pioneered equipment design—having handled in succession lighting from the carbon filament lamp, Gem and Tantalum lamps, pressed wire Tungsten and drawn Tungsten lamps. Today it manufactures equipment for the latest lighting development, fluorescents.

The original St. Louis Brass Manufacturing Company organized by Mr. Guth, became in 1923 the Edwin F. Guth company although the ownership and management did not change. It manufactured and sold the patented Brascolite which was packed in a unit carton and thus was particularly adapted to selling through wholesalers.

Three sons of Mr. Guth carry on the family tradition—Fred E. Guth holding up his end in the advertising and sales department, Ed Guth, Jr., in the production department and James Guth in the correspondence department.

The History of a Family

The history of a family is the history of Hazard Insulated Wire Works

SINCE Revolutionary days, when Ebenezer Hazard assisted Washington and Franklin in the formation of a post office department, the Hazard family has moved on the American industrial scene.

Erskine Hazard, his son, with Josiah White had an iron foundry and wire mill near Philadelphia where wire nails were made, where they cast cannon during the war of 1812, from which they built the first wire suspension bridge in America across the Schuylkill river in 1815.

This progressive pair of men acquired the Lehigh Coal and Navigation Co., established the town of Mauch Chunk, Penna., and moved their mills to the new town.

Erskine Hazard and his son, Fisher, operated a wire rope factory in 1846 in Mauch Chunk, where they pioneered wire stranding and closing machinery. In 1870 the Hazard Works were moved to Wilkesbarre in the heart of the anthracite region, where the rapid development of the electrical industry by 1898 inspired them to enter the manufacture of electrical cables, in which field the company achieved great success.

When changes in the set-up of the electrical industry created new problems, Hazard decided to sell the Electrical Wire and Cable Division to the Okonite Company and since 1928 it has been operated as the Hazard Insulated Wire Works Division of the Okonite Company.

1100 Tons in 5 Hours

Example of Hubbard and Company's ability to meet emergencies was the shipment after the New England hurricane of 1100 tons of finished products 5 hours after receipt of orders

POWER lines across the desert, through the woods, across a rolling country side—wherever electricity goes —there products made by Hubbard will be also. And because it fills its orders, emergency or otherwise, promptly and always with quality products this company has enjoyed unusual and steady growth.

Impressive proof of Hubbard service came in September of '38, when the Pittsburgh plant shipped 52 carloads or about 1100 tons of finished products within five hours after receipt of order, this being 98½ per cent complete shipment. The balance of 1½ per cent, mostly special items, were manufactured and shipped within three days.

Five thousand items in the line of overhead and underground electrical construction and distribution specialties come out of the present plants at Oakland, Chicago and Pittsburgh—plants which have a total capacity of between 45 and 50 thousand tons of pole line hardware and construction specialties.

In 1843, when Hubbard, Bakewell and Company was founded by Charles W. Hubbard, father of the present John W. Hubbard, in a small wooden shop near the site of old Fort Pitt, original products were shovels, saws and axes.

Expansion followed separation of the various departments in 1896—in 1900 the telephone department was organized to manufacture pole line hardware, in 1909 the Peirce Specialty Company was purchased to add a line of steel electrical construction specialties, in 1921 a plant was built at Cicero, Ill. to serve the midwestern territory. Then in 1924 a plant at Emeryville, Calif. was added to take care of Pacific Coast demands. Today factories and warehouses are located in Pittsburgh, Chicago, Oakland, Hamilton, Canada; and Havana, Cuba.

Our Birthdays Aren't Far Apart

Ilsco Copper Tube and Products, Inc. was born only a short time before the Wholesaler's Salesman appeared on the electrical scene.

THE theme of primary importance to the sales program of Ilsco Copper Tube and Products, Inc., is the one which is nearest the heart of electrical wholesalers wherever they may be.

In promoting the sale of the large line of electrical connectors, solderless lugs, copper tubing and fabricated tube parts made by this company, its policy has been one of *active* electrical wholesaler support; and electrical contractors and others of the trade are encouraged to look to electrical wholesalers for all their needs.

In fact Ilsco representatives do not confine their efforts merely to pushing their own product, but when in actual contact with contractors and industrial buyers they attempt to sell the whole story of why the wholesaler should be used as the main supply source for electrical equipment.

Ilsco officials believe that this policy of intensive cooperation has been an important factor in making possible the growth in sales volume that the company has enjoyed.

On Seven and a Half Acres

Products of the Jefferson Electric Company come from its modern Bellwood, Illinois, plant where the buildings alone cover 7½ acres

ORGANIZED in 1915 to manufacture a complete line of air-cooled transformers, the Jefferson Electric Company now manufactures a wide range of products—fuses, air-cooled transformers for mercury lamps, fluorescent lamp ballasts and auxiliaries, transformers for a multitude of

The old expands into the modern new—Jefferson's plant at Bellwood.

applications such as for luminous tube (Neon) signs and illuminations, power circuits, oil burner ignition, signals and relays, electric toys, etc.

Following consolidation with the Chicago Fuse Manu-

facturing Company which had been a pioneer manufacturer of enclosed and renewable fuses, switch and outlet boxes and cutout bases, it was found desirable to build a new plant and large enough so that the operations of the two companies could be consolidated and carried on more economically.

The new plant at Bellwood occupies seven and a half acres, was completed in 1932. It provides pleasant and healthful working conditions, is equipped with modern machinery, includes extensive chemical research and engineering laboratory facilities for experimental and research work togther with inspection and test of raw materials and finished products.

Top executive since the company's inception is J. A. Bennan; J. C. Daley as vice-president has a company-long service record, and the name of A. E. Tregenza, sales manager of Chicago Fuse, was added to the Jefferson roster as vice-president in charge of sales when the two companies joined forces.

Has Barked Year after Year

Original "Bulldog" trademark of the Illinois Electric Porcelain Company has scored with wholesalers and contractors for thirty years. It means knobs, tubes and cleats, everything in electrical porcelain

A SERIES of "originals" stands to the credit of the thirty year old Illinois Electric Porcelain Co. C. W. Kettron was the original and is now president, the original trade name was "Bull Dog," and the original policy from which the company has never varied was 100 per cent wholesaler.

Organized in 1910 to engage chiefly in the manufacture of porcelain knobs, cleats and tubes for open wiring, the company not only has turned those out in huge quantities but branched out to become one of the large producers of insulators for power transmission. Whereas once only three presses were available for dry porcelain, now 40 of these machines are operated in the production of thousands of pieces hourly in the factory at Macomb, Ill. Also today a tunnel kiln 396 feet long, one of the largest in existence, is used in the process, which carries the units along under completely controlled conditions, resulting in products of uniformly high quality. At first only a small department was devoted to the manufacture of high tension wet porcelain. This department, during the last 15 years, has grown to be a very large and vital part of the company's manufacturing activities.

Beginning 30 years ago with a few simple pieces of both dry and wet porcelain, the company now produces several thousand styles and complicated designs.

Squaring with Tradition

Since its founding in 1909, constant aim of the Monarch Fuse Company, Inc., Jamestown, N. Y. has been directed to squaring with what through the years has become a tradition—that of producing a superior line of protective devices which will be second to none in the industry. J. B. Mitchell (picture), is vice president and general manager. Other officers of the company are Max M. Lear, president, and V. M. Johnson, secretary.

Silver Bells for Iron Conduit

Some organizations prefer to expand operations, make a large variety of products, but National Enameling & Mfg. has always concentrated on rigid conduit.

THE men behind the National Enameling & Mfg. Company know all about making various types of rigid conduit, for the company has been specializing on this line since 1910. What's more they like the business and have no desire to try manufacturing other products. So they continue to put all their efforts into the manufacture of rigid conduit—various kinds such as Alumaduct, Electro-Galvanized, Hot-Dipped Galvanized, Enamelduct Black Enameled.

During its first four years of existence, a firm with the N. E. & M. name made iron conduit at Youngstown, Ohio, but in 1914 fire destroyed the plant completely. The following year Jno. S. Patterson, U. S. Armstrong & B. B. White purchased the assets of that company, established a new factory at Etna, Pa., and set up sales offices in Pittsburgh. This arrangement continued until 1936 when the offices were consolidated with the plant at Etna.

Throughout its 25 years of existence, the company has maintained a rigid and constructive sales policy, cooperated actively with contractors, and worked closely with its wholesalers and their salesmen.

another step forward in the manufacture of wire. Soon their products were being installed by railroads, utilities, factories and buildings; and their Manson friction and Okonite splicing tapes were being distributed by wholesalers before the turn of the century.

Business gradually expanded and under the present Frank C. Jones (son of the earlier Mr. Jones) Okonite established the Okonite-Callender plant in 1924 for the manufacturer of high-tension paper cable. Three years later the old Hazard Mfg. Co. at Paterson, N. J., was purchased and now the Hazard Insulated Wire Works Division specializes on building wire for the construction industry, cables for mines and utilities.

As the electrical industry has progressed, Okonite has also moved ahead through continual research to find better methods for manufacturing their various products. Also they have found it good business to continue to reach construction markets throught electrical wholesalers.

A Year Before Edison

Back in 1878, a year before Thomas A. Edison perfected his incandescent lamp, John Haven Cheever founded the Okonite Co., with a compound for insulating wires as nucleus.

THE story of the Okonite Co., manufacturers of wire, cable, tape and splicing materials, dates back to 1878 when John Haven Cheever pioneered the development of a mineral-base rubber compound for insulating wires,

Frank C. Jones directs Okonite.

which was far superior to gutta percha, then in general use, because the latter could not stand up when exposed to the air.

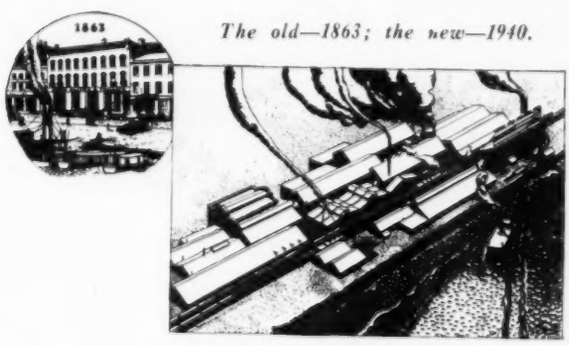
Not long after, Frank Cazenove Jones, Sr. joined him and by 1884 they adopted the strip process for applying their compound around the conductor—which marked

Since the Civil War

Growth which spans the whole of the industrial era since the Civil War is recorded by the Oliver Iron and Steel Corp.

FOUNDED when the Civil War was still an open issue, the development of the Oliver Iron and Steel Corp. has kept pace with the innumerable changes of an industrial era. The demand for Oliver bolts and nuts passed progressively from those for plows and carriages of those early days to those of railroads, ships, bridges, autos and pole line hardware of today. Even today the company which helped to develop, and did produce, the early telephone and telegraph line hardware used in this country is constantly broadening its product line to meet the ever-increasing demands of modern electrical power transmission and distribution systems.

Founded in 1863 with an original capital of $15,000 as a small bolt and nut factory, it had grown under the guiding genius of Henry W. Oliver to a $1,000,000 industry by 1880 and had established complete control of



The old—1863; the new—1940.

production from raw materials to finished product. Made from prime, new-rolled, open-hearth steel, galvanized by the "Fassinger" Double Dip Hot Galvanizing Process, to insure a uniform galvanized finish and greater resistance to rust, Oliver materials are built to a high standard.

A product parade of the company would include in its pole line materials; anchoring, guying, and grounding materials; bolts; cross arm braces, cable and telephone materials; clevises for dead ending and guying; insulator pins and accessories. Oliver products other than pole line materials include bolts, nuts and rivets, track bolts, screw spikes, frog and switch bolts, plain and upset rods, car and general forgings and "Tyrone" brand picks, mattocks, grub hoes, crowbars and wedges.

Paul Revere's old plant

Located where Paul Revere wrought copper and using one of his old buildings as warehouse, the site of Plymouth Rubber Company's plant has figured in historical events past and present

THE initiative that today makes men catch a business trend on the upswing no doubt was like the driving force which impelled Paul Revere to step into the breach and carry his midnight message. Perhaps that spirit of "Measuring up" is peculiar to certain spots, perhaps not, but the site of the Plymouth Rubber Company's plant has figured in some crucial periods of American history.

In 1717 the colonists built a corn mill on the spot. It was used during the Revolution as the site of a powder factory, during the Civil War for the manufacture of brass cannon, since 1896 it has formed part of the tract occupied by Plymouth Rubber's factory. During the World War gas mask materials, rubber heels for army shoes, raincoat fabrics for army coats, rubber sheeting for hospital beds and friction tape for army and navy electrical systems—came from Plymouth's plant.

Wholesalers know Plymouth best for its tape.

Not only has Plymouth done its bit in war times, but it makes constantly heavy peace time contribution of products which are essential to the industrial and commercial progress of the nation. Plymouth today rubberizes more cloth than any other factory in the world, carries 600 different items in its line, has effective distribution in North and South America, Europe, Asia and Africa, and branch factories in England and France.

It is interesting to remember that a company which is known to electrical wholesalers principally for its tape also sends from its factories such things as hospital sheetings, heels, taps, crepe and sport soles, pyroxlin coated fabrics and rubber bands.

Reflected in Silver

With a silver mirror reflector as basic and original product, the Pittsburgh Reflector Company line includes some eight hundred different items

Activities of Pittsburgh Reflector Co. are directed by E. W. Simons.

WHEN the advent of the gas-filled type "C" lamp brought new problems straight to the door of the Pittsburgh Reflector Company, the inventive genius of E. S. Simons went into action, developed a process which built a business.

New in 1915, those lamps generated heat far in excess of that produced by the old carbon or tungsten lamps, made new demands upon reflectors. Under Mr. Simons' supervision a process was developed which has remained a company secret, by which the silvered reflecting surface was sealed between the glass and a thin sheet of copper and this proved to be highly satisfactory under all service conditions.

Started in 1910 as the Prismatic Mirror and Reflector Company, by 1920 the company enjoyed sufficient sales volume so that it became practical to manufacture its own glass blanks. The factory was moved to Irwin, Penna. and a glass manufacturing plant was added.

Today about eighty types of silvered glass reflectors are

the backbone of a line of products which consists of some eight hundred different items including reflectors, holders, built-in lighting units, colorlites, interior spots and floodlights, theater lighting equipment and fluorescent lamp equipment.

The silvered mirror reflector occupies an important place in the story of the evolution of modern illumination, and it appears that the Pittsburgh Reflector Company, under the guidance of its president, E. W. Simons, has contributed liberally to that story.

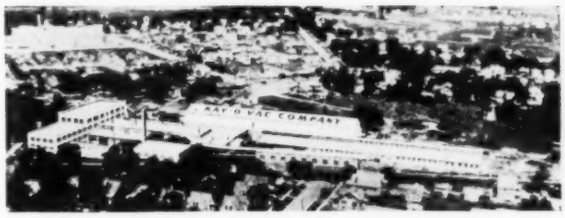
A Quartet Started It

Four Men Formed Quadrangle Mfg. Co.—Hence the Name.

FOUR men organized the Quadrangle Mfg. Co. to manufacture two chain commercial hangers. Less than 10 years later, in 1928 their sales volume demanded increased capacity and they decided to move from Chicago to Peoria, where Quadrangle quadrupled its floor space.

Starting with only commercial hangers new products were added frequently so that even the first catalog showed also various types and sizes of reflectors, the nucleus of the now complete line. The present 112 page catalog represents over 1000 individual items bearing the Quad trademark.

To expedite Quadrangle's continuous wholesaler policy, warehouse stocks are maintained in New York, Boston, Philadelphia, San Francisco, Los Angeles, and Seattle, on which wholesalers can draw for their current requirements.



One of Ray-O-Vac's three factories.

outlook for a dry battery manufacturer, that James B. Ramsay and a group of Madison, Wis. men became interested in the small Chicago company and arrangements were made to transfer its operations to Madison.

By 1910, the organization was strong enough to take on and execute a contract to manufacture a million dry cells, and as the business continued to expand, plant facilities were increased. At the end of the first twenty years, sales and production were at a peak. Demand for radio batteries in the early 1920's was so intense that something over a hundred companies were in business. Who will forget the effect on battery sales when it first became possible to get power for radios from the house circuit?

Drastic measures became necessary, while new markets were sought out and developed. Auto radio was a temporary stop gap. Then Blake Manufacturing Company's flashlight case business was purchased in 1929, Lancaster Carbon Co. several years later, both valuable in consolidating the company's position.

Two years ago radio, which had administered such a heavy blow when it turned to house current as its power source partially reversed itself, again helped to boost sales as the new portable sets pushed up the demand for batteries.

Today, the company enjoys broad public acceptance of its flashlight and dry batteries. During the busy season, nearly 2,000 persons are employed at the three Ray-O-Vac plants located at Madison, Wis.; Lancaster, Ohio; and Clinton, Mass.

Lights—Music

Ray-O-Vac batteries bring light to flashlight users, music to portable radios

STARTED in 1906 at a time when Henry Ford was using two sets of six dry cells each in his cars, the French Battery Company launched its products in a growing market.

Telephone conversations in 1906 were almost entirely dependent on No. 6 dry cells, automobile and stationary gas engine ignition was by dry cell. So healthy was the

Name No Longer Covers

Starting with signalling equipment, Signal Electric has expanded operations into many other lines.

WHEN the old Menominee Electric Co., which began business in 1892 became the Signal Electric Mfg. Co. in 1919, its chief products were doorbells, buzzers, gongs, medical batteries, wireless and telegraph instruments, so "Signal" was an especially fine choice of name since it indicated the type of products manufactured.

Today that name is no longer all-inclusive, as the com-

From here come fans, motors, drills.

pany has broadened its activities to include the manufacture of a large line of ventilating equipment, portable electric drills and fractional horsepower motors.

During the last ten years, Signal has enjoyed especially rapid growth, found it necessary two years ago to enlarge the plant at Menominee, Mich., by 40,000 square feet. Signal normally employs 350 people. It has sales offices in all principal cities, and its representatives cooperate closely with electrical wholesalers.

Always Just One Answer

Trico Fuse Manufacturing Company has just one reply to inquiries about products, "Quality Comes First,"—gives one and all identical answers to questions on price

Treasurer Jung emphasizes a policy.

THREE points to the Trico triangle, platform of an American business, are 1) To build only products of outstanding quality and distinctive design. 2) To sell through the wholesaler for the best interest and service to the ultimate user. 3) To build a solid profitable business on the basis of one policy and one price for all.

Growth since the company's establishment in 1918 from 2,000 square feet of floor space to its own modern plant of over 40,000 square feet has been based on products which are not designed with the idea of meeting price competition.

Research and testing laboratories combine with finest precision machinery to insure high production. Results of Trico's supporting its own engineering and designing staff have been numerous new products that are sold through wholesalers and dealers everywhere.

Most recent addition at Trico is a Lubricator Division which offers among other items some new visible and fully automatic lubricating devices for all types of machinery.

Speaking of the Trico quality and sales policy, O. H. Jung, treasurer of the company emphasizes: "Trico will continue this very successful policy to the very end."

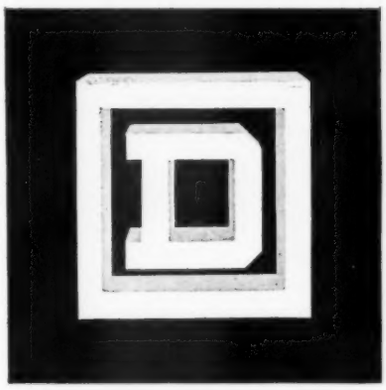
A Trademark Becomes a Name

Once best known by its trademark, that symbol and the name of the Square D Company now are one

AN organization which could grow in thirty-eight years out of a one room loft into factories in eight cities must have been capable of sensing and capitalizing the current trends of those thirty-eight changing years. Characteristic of that swift adaptation to tempo, was the change of company name in 1917. It had as its trademark a "D" within a square—soon customers were calling for "Square D" switches, so accepting popular demand the name was changed to the Square D Company.

Of prime importance to the company in its manufacturing and selling efforts, has been emphasis and reemphasis of the principle that eventually safer handling of electricity is lower in cost. That thought has been behind all activities, from product research to consumer sales.

The history of the company is marked by steadily increasing the scope of its own facilities and adding new products to the line. In 1920 a porcelain plant was purchased, which now produces bakelite as well as porcelain. An assembly plant was established in Canada which later developed into the Canadian owned Square D Company. In 1929 the Industrial Controller Company of Milwaukee brought with it a line of motor control, pressure, float and vacuum switches. In 1930 the Diamond Electrical Manufacturing Company came into the Square D family. Late in 1939 the Kollsman Instrument Company, Inc. makers, of precision aircraft instruments, joined Square D.



Speaks For Itself!

Products now include safety switches; multi-breakers; motor and welding control; circuit breakers; service entrance equipment; pressure, float and vacuum switches; circuit breaker and fusible panelboards and switchboards; Square-Duct; commercial refrigeration controls; porcelain and Bakelite products; and aircraft instruments.

Romance In Rubber

History of United States Rubber Company, rich in romance, not lacking drama, parallels growth of industrial America

NEARLY a century ago some far-sighted, hard-headed New England pioneer industrialists who evidently envisioned some of the possibilities of that thing called rubber laid the foundation for the huge industrial community of enterprises that we know today as the United States Rubber Company.

Early records are obscure, other than that in the 1840's there was mention of the National Rubber Co. That name again emerges in 1868 when such company and the Providence Rubber Co. (founded in 1861) decided to consolidate under the name National India Rubber Co.

This company commenced the manufacture of rubber-covered wire in the 1880's and it became the nucleus of the electrical products division when in 1892 the present U. S. Rubber Co. was incorporated.

Successively other companies were acquired, new products added, until today there are 35 subsidiaries and in addition U. S. Rubber operates one of the largest rubber plantations in the world—132,000 acres in Sumatra, with nearly 100,000 acres of trees actively producing crude rubber.

With the wider use of rubber products as one of its constant and major objectives, the research activities of this company have been productive of endless numbers of new uses and improvements, as well as some revolutionary new developments.

Being one of its important departments, the electrical division naturally came in for a good share of the fruits of research such as Royal cord, Zipcord, Rainbow line of colored insulation for circuit identification, canned tape, Twinsulation and many others.

Manufacturing practically everything in which rubber is used, from automobile and tractor tires down to linemen's rubber blankets, rubber washers, mechanical and molded rubber goods, U. S. Rubber operates twenty factories in various U. S. cities, has six subsidiaries in Canada and fifteen in other foreign countries. Company

New headquarters of U. S. Rubber

headquarters are in New York, now being moved to the company's new building in Rockefeller Center.

Among U. S. Rubber Co.'s executives best known to the electrical industry are E. W. Higbee, manager of wire, cable and battery separator sales, and E. F. Brownworth, manager of tape sales.

For More Control

Making electric control devices, Ward Leonard Electric Co. has pioneered developments in that field.

AN electrical contractor who turned electrical manufacturer, H. Ward Leonard, founded Ward Leonard Electric Company in 1892, and an award received at the

Chicago Exposition for Vitrohm (vitreous enameled) rheostats foreshadowed the lines along which the company was developed.

Today, in addition to manufacturing various control devices, Ward Leonard produces needed ceramics and enamels within the confines of its own plant. The latest development is a new green enamel, a crazeless enamel structure, resistant to moisture and humidity.

After a series of moves in search for more desirable quarters, the company is now located in its own four-story building at Mt. Vernon, N. Y., which covers about a half-block area.

Ward Leonard's factory at Mt. Vernon, N. Y.

Two interesting developments, important at a time but no longer associated with its manufacturing activities, were the automobile lighting system and the Ward Leonard system of control used for steel mill drives, gun turrets, elevators, electric hoists, etc.

An amazing percentage of the controlled lighting at the World's Fair were Ward Leonard installations, many of them of the new Autrastat type. The company has been active in the development of dimmers for light control used in theaters, churches, public buildings.

One of the latest developments is the Electronic Voltage Regulator, is said to provide corrective action with the slightest change in terminal voltage.

In 1899, Trumbull started here.

offices in six principal cities of the United States. From the single product, a broad line of electrical products has sprung. And—as for those four young men—John H. Trumbull, Frank T. Wheeler, Henry Trumbull and Stanley S. Gwillim,—they have kept executive control during all those forty years, and through their efforts have built an organization which is still so closely knit that it thinks of itself as the "Trumbull bunch". It is an organization that sticks together.

Best measure of the loyalty of its employees is the fact that, in the home factory at Plainville, 50 per cent have been there ten years or over, 20 per cent are in the twenty-year class and about 10 per cent wear a quarter century service pin.

The first item in the "Circle T" line was made at a time when the National Electrical Code was two years old. As the industry broadened its requirements and set up new standards, "Circle T" met the new needs and held its trade. Today its line includes feeder distribution systems, safety and enclosed switches, panelboards, power distribution boards and other associated equipment.

Selling exclusively through wholesalers the company paid tribute to its distributors on the occasion of its fortieth anniversary in these words, "A most pleasing privilege is to express . . . appreciation of the loyal support given by our distributors and the trade in general all along the line in handling, purchasing and specifying our equipment—without which our progress from the little chuck shop of 1899 to the nation-wide selling organization of today would have been utterly impossible."

Forty for Four

With 1940, the Trumbull Electric Manufacturing Co., scores forty years of progress under the executive leadership of the same four men

THE factory—what had been an ill-fated wooden "chuck shop"; the complete line of products, a quarter turn porcelain rosette; the executives and most of the production force, four young men in their early twenties—that's the way the Trumbull Electric Manufacturing Co. came into being in October 1899.

From the one small building have come large modern factories in Plainville, Conn; Ludlow, Ky; Los Angeles; San Francisco, Seattle and Trenton; and branch sales

Safety Through Switches

The aim of The Wadsworth Electric Mfg. Co. has been always to make the word "Safety" in Safety Switches mean just that to the fullest

SINCE its inception, The Wadsworth Electric Manufacturing Co. of Covington, Ky., has been increasingly

successful in producing and marketing a broad line of safety switches and other control devices primarily because of the strong cooperative spirit which has existed throughout the organization. In other words the company's success and growth can not be attributed to any one person nor to one specific event, but instead, to the contributions of many individuals.

All members of the staff have worked continuously and effectively with industry interests to encourage the approval and use of a better class of switches and allied products. Then in their own shop they have made every effort to have the word "Safety" in Safety Switches

Strong policies built Wadsworth's factory.

fully complied with in the product, thereby assuring the ultimate user an installation that will prove adequate, safe, and dependable.

Along with this basic manufacturing policy, Wadsworth has operated under a sales policy that has been found highly satisfactory. Under that policy Wadsworth products reach contractors, and others who install their equipment, solely through recognized electrical wholesalers, thereby giving Wadsworth effective sales coverage in all sections of the country, while making certain that buyers will have adequate local stocks to draw on.

The Wadsworth business was started in Covington, Ky., in a small brick loft building twenty-odd years ago. Demands for its products outgrew those quarters and in 1922 the company moved into a large and strictly modern plant.

Operations are in direct charge of L. G. Kuhlman, president, while Paul M. Leary is sales manager.

Thirteen Can Be Lucky

Their first catalogue boasted of 13 products, now Westinghouse manufactures thousands of items, ranging in size from locomotives down to my lady's curling iron.

ONE January morning in 1886 a comparatively small factory building in downtown Pittsburgh long empty, showed signs of new activity. Seen at work there were

President Bucher spreads good cheer.

George Westinghouse and his 200 employees turning out equipment for the young electrical industry. Before long Westinghouse issued his first catalogue describing 13 products. That was the beginning. Today the company makes thousands of items for all phases of the electrical industry. Similarly the number of employees has increased to an average of 40,000, and from that original small factory, production facilities have multiplied until now they include the huge headquarters plant at East Pittsburgh and 19 other plants in six states.

George Westinghouse, founder of the company, made many important contributions to the industry, but the one that influenced the whole course of electrical development was his successful championing of alternating

Foreground—Westinghouse Memorial Bridge. Background—East Pittsburgh Works.

current in the early bitter battle between advocates of that method of transmsision and direct current.

Until after the turn of the century, the electrical market was relatively small and concentrated in or near large cities, consequently the company could reach the major portion of its customers direct. But with the expansion of electrical lines to less populated areas and the application of electricity to many new uses, new products came into wider demand over larger areas. It became uneconomical to reach these growing and valuable mar-

kets direct, so Westinghouse began selling many of its products through its agent-jobbers, and through dealers so that today Westinghouse products are readily obtained in all parts of the country.

At the present time the Westinghouse coordinated sales system consists of 113 district offices, 101 agent-jobbers, 75 industrial agents and roughly 500 motor dealers, welding dealers and special jobbers. Sales efforts are backed by service facilities from 30 warehouses and 36 special service shops located in all important business centers.

Built On Change

More than 20 years ago, the founders of Wiremold started to crack a prejudiced market and successfully turned doubting Thomases into buyers.

ELECTRICAL men are about like any other group, that is, they don't take to rather revolutionary new ideas too quickly. So when Wiremold was introduced more than 20 years ago, as an easy and speedy means for re-locating outlets without the necessity of going to much expense, it received rather a cool reception. Furthermore, it naturally received bitter opposition from certain electrical interests.

Nevertheless the sponsors of Wiremold believed they had a good thing and kept educating the trade as to its uses so that as time went on, architects, contractors, engineers and wholesalers learned to realize that this product filled a definite need in certain applications. That's why Wiremold finally gained national acceptance and today enjoys the status of a staple line that is used and can be bought everywhere.

The man who guided the Wiremold Co. through this period of scepticism and brought the organization to its present position is D. Hayes Murphy, president and treasurer since 1919. He came to Wiremold with a broad electrical experience. Two years after graduation from the University of Wisconsin (class of 1900), he became secretary-treasurer of the American Interior Conduit Co. Then he was general manager of the Safety Armorite Co. for a year, when he moved to the American Conduit Mfg. Co. as secretary-treasurer, advanced to the presidency and resigned in 1919 to head up Wiremold.

President D. Hayes Murphy.

Mr. Murphy not only directed the efforts that have placed Wiremold where it is today but has made certain that the company would add other products whenever new needs or new developments came along, that involved products which could be made economically in the Wiremold factory.

At the present time Wiremold's electrical wholesalers have the following products to sell: Surface Raceway Wiring Systems, Fluorescent Lighting Equipment and Industrial Units, Multi-Outlet Systems, Overfloor Wiring Systems, Non-Metallic Flexible Tubing, Non-Metallic Sheathed Cable.

Forty-four in 'Forty

Founded in open knife switch days, Wm. Wurdack Electric Mfg. Company today makes modern control equipment.

Modern headquarters of Wurdack.

FORTY-FOUR years ago, when carbon lamps were the latest thing in lighting, William Wurdack decided to go into business for himself.

In those early years the principle items turned out in the Wurdack factory were open type knife switches. Later panelboards and switchboards were added, and in 1904 the business was incorporated. Today the company still concentrates on the same lines except, of course, that the open knife switch is no longer a factor.

But during all of those years, Wurdack management has insisted on keeping pace with current advances in the design and manufacture of its type of equipment. Research and development work have been carried along so as to make sure that Wurdack products would be improved and refined constantly to meet the changing and more exacting engineering requirements.

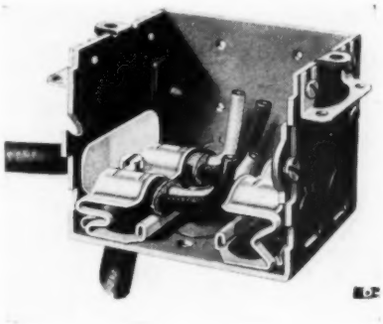
For a number of years, the factory was located at 19 South 11th St., St. Louis, but in 1927 the organization moved into a large, new modern fireproof building which had been designed and built to meet the company's special requirements.

NEW PRODUCTS *you can Sell*

DIRECT-INDIRECT FIXTURES

Successor to the company's "Brascolite" fixture, the "Alzak Brascolite" is aluminum fixture which is said to be efficient in avoiding dust, bugs, breakage, glare or drop in efficiency. It delivers direct-indirect, high intensity lighting. For use in stores and offices. Dimensions—Ceil. refl., 15¼"; bowl, 9⅛". Edwin F. Guth Co., St. Louis, Mo.

NON-METALLIC CABLE CLAMPS

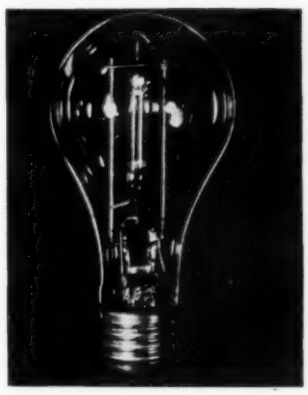


"Raco" non-metallic cable clamp permits side (end) or bottom entrance, or both simultaneously, bushes cable sheath away from sharp edge of knockout, accommodates a wide range of sizes, clamp is held clear of the knockout until ready to be used. All-Steel-Equip Company, Inc., Aurora, Ill.

WHAT'S NEW

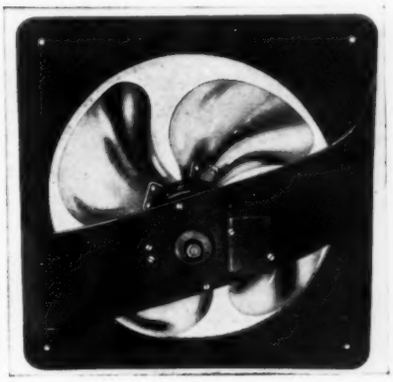
Each month WHOLESALER'S SALESMAN devotes several pages to new developments that wholesalers and their salesmen can use to develop more volume, better profits for their customers and themselves. Here are details and illustrations of new products for the contractor, industrial and retail markets.

SUNLIGHT LAMP



Type S-4 lamp is designed for use in home as well as for animal and poultry husbandry. Produces approximately four times as much ultra-violet per watts consumed as does makers' Type S-1 lamp. Can be operated only in equipment made for its use. Heart of the lamp is a quartz capillary element surrounded by an outer bulb made of ultra-violet transmitting glass. Service rated at "400 applications" rather than "hours". General Electric Co., Cleveland, Westinghouse Elec. & Mfg. Co., Bloomfield, N. J.

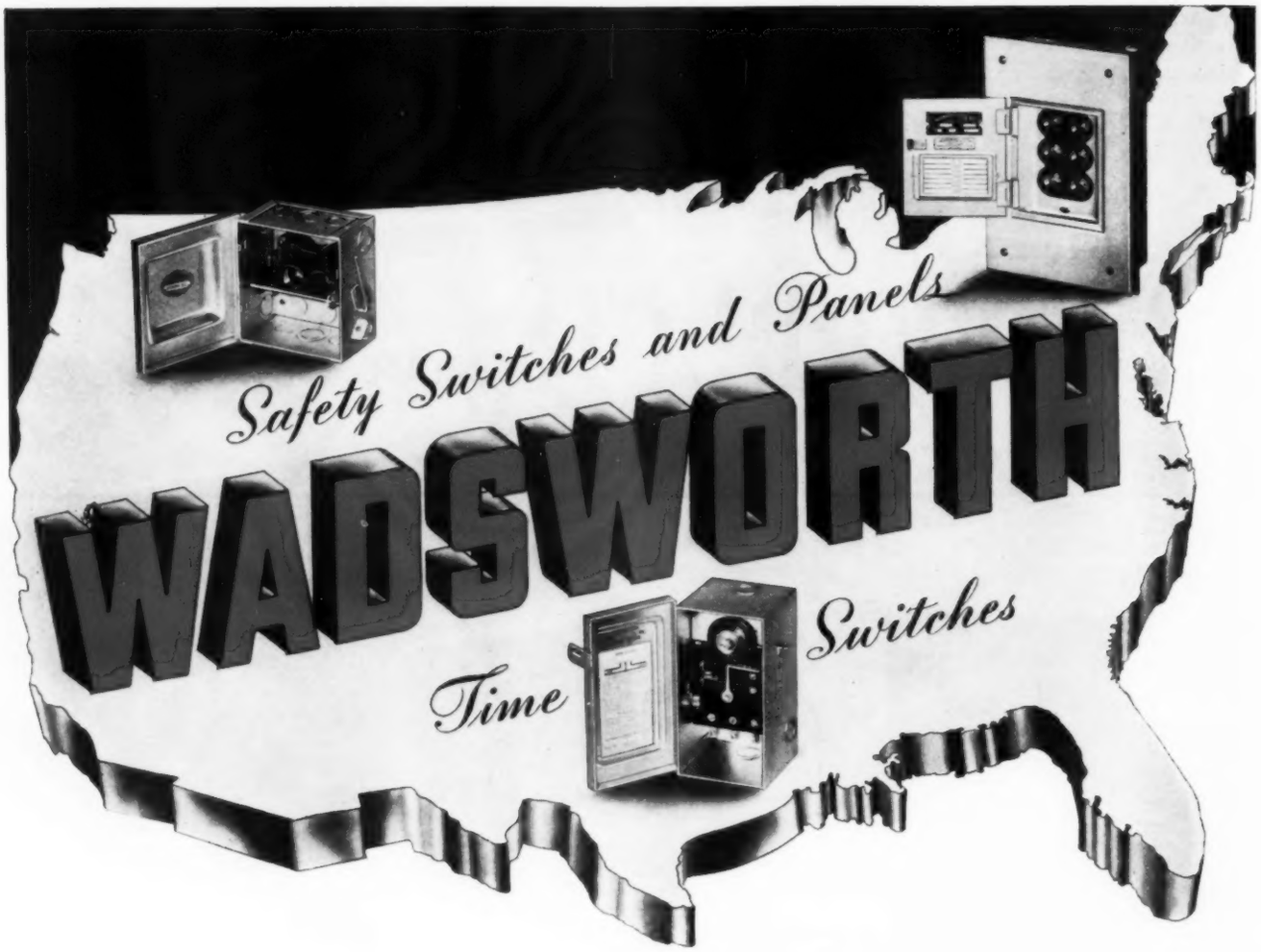
VENTILATING FAN



"Challenger" line of ventilating fans are streamlined in appearance, adaptable for installation in walls, windows and transoms. Three sizes—10", 12", 16". Has totally enclosed motor, self-lubricating bearings with wool-packed oil reservoir, chrome plated fan blades and easy-to-mount frames. Signal Electric Mfg. Co., Menominee, Mich.

DESK LAMP

Polaroid desk lamp model one-fourteen offers light which has passed through a window of Polaroid light-control material which is said to eliminate glare and deliver a soft light of high illuminating



DON'T STOP, it's wonderful . . . that loyalty and support you Electrical Wholesalers and Salesmen throughout the United States have given us. Thanks a million. During the many years Wadsworth has been making switches numbers of us have come a long way together.

You know WADSWORTH has always made a good product; you know, too, that WADSWORTH developed and pioneered many improvements...never were Electrical Wholesalers asked to sell a WADSWORTH Product about which there was the least doubt of satisfactory performance.

WADSWORTH is determined to give Electrical Wholesalers the same quality product in the future, as in the past. We pledge ourselves anew to carry on the ever diligent search for new and better methods in keeping with sound electrical practice.

"BUY WISELY — BUY WADSWORTH"

The WADSWORTH ELECTRIC MFG CO. INC.

Covington, Kentucky.

qualities. Shade and base of Bakelite. Finishes—black and chrome or walnut and chrome. Uses 100 watt frosted bulb. Polaroid Corp., Boston, Mass.

FLUORESCENT FIXTURES

Adjustable fluorescent units, one triangular the other cylindrical, that can be installed with three to seven lamps from 18 to 48 in. in length. The triangular one is designed to use three to five lamps, the cylindrical five to seven lamps. Installations using from 45 to 280 watts are possible with these units. Main body is vitrified porcelain steel, both units are equipped with tu-lamp auxiliaries. Efcolite Corp., Trenton, N. J.

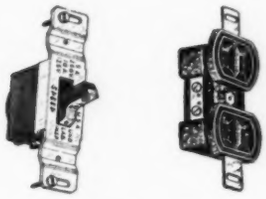
DUPLEX RECEPTACLE

Three and two wire duplex receptacle combines in one device standard "T" slot plug connection and also a three-wire polarized plug outlet. Regular parallel or tandem blade caps fit one side, and 10 amp. three-wire caps may be used in the other. Different styles available with independently wired circuits or with common feed and return. Receptacles fit standard duplex Bakelite or metal plates. Arrow-Hart and Hegeman Electric Co., Hartford, Conn.

FLUORESCENT CASE UNIT

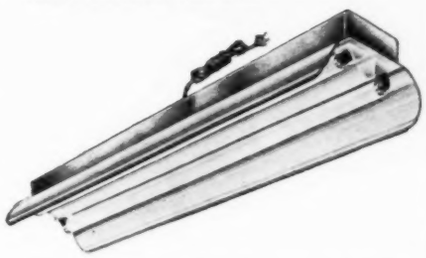
Line of show case lighting equipment especially designed for use with fluorescent lamps, also adaptable for use with lumiline lamps. Compact, simple and easily installed. Market in stores where fixture and reflector units of small cross section are needed. The Wiremold Co., Hartford, Conn.

BAKELITE DEVICES



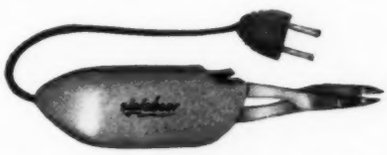
Line of all enclosed Bakelite flush toggle switches and receptacles. Toggle switch available in single pole, double pole, three way, or four way. Brown or ivory. Illustrated is No. 6311. Polarized flush receptacle is available in duplex or single types. Brown or ivory. No. 6203 is illustrated. Called "Speed" line Marks Products Co., 84-90 N. 9th St., Brooklyn, N. Y.

FLUORESCENT FIXTURE



"DayBrite Two-Forty" fluorescent industrial fixture is designed for lighting production areas so that with conventional 10 ft. spacing and mounting heights, at least 20 ft. candles of illumination is delivered. Tulamp ballasts correct power-factor and flicker. Removable starting switches are located in sockets. Completely wired with sockets, lamp starters, starting compensator. For a.c. operation. Day-Brite Lighting, Inc., St. Louis, Mo.

ELECTRIC SCISSORS



Chrome plated high carbon steel blades, precision ground, fitted and hardened. Handle of ivory plastic. No bearings and no oiling necessary. Operates on 105-125 volts, 50-60 cycle, ac. Called Zipishear. General Transformer Corp., 1252 W. Van Buren St., Chicago.

HEAT SENSITIVE CABLE

"Protectowire" heat-sensitive cable is wired as a switch circuit and automatically makes a firm, pressure contact be-

Monarch RENEWABLE FUSES

A COMPLETE RANGE OF RENEWABLE FUSES AND RENEWABLE LINKS

Listed as standard by Underwriters' Laboratories with Label Service to 600 Ampere, 250 volts and 600 volts.

Monarch Fuses comply with Federal Specifications.

MAXIMUM PROTECTION

Prevent needless blowing of fuses with Surge Lag Links and reduce motor shutdowns. Monarch Fuses blow only when they should. They are positive protection to property, personnel, and expensive electrical equipment. Approved by the Nation's most exacting fuse buyers for over 20 years. Be ready to supply their demands . . . stock the complete range.

ONLY 3 PARTS

1—CAP
2—CASE
3—BLADE

EASIER TO RENEW

Few parts mean quick, positive assembly . . . foolproof assembly . . . easy cleaning.

RUGGED CONSTRUCTION

Best grade gray-horn fibre casings . . . Blades assembled to sturdy fibre bar . . . Rigid blade alignment . . . Machine threaded brass inserts.

2 TYPES OF LINKS

1. Drop-out 2. Surge Lag

Write for Samples and discounts.

MONARCH

1909 Established 1909

FUSE COMPANY, INC.

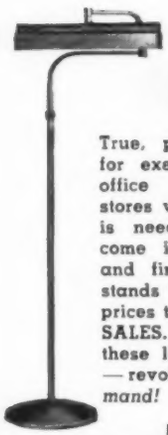
JAMESTOWN, NEW YORK

FLUORESCENT Lamps

FEATURES—STYLES—PRICES

make these

SALES LEADERS!



True, practical daylight lighting for executive desks—for general office requirements — for retail stores where exact color matching is needed. Faries Fluorescents come in many attractive styles and finishes—clamp-ons or floor stands for *any* type installation—prices that open the way to MANY SALES. Get a display stock of these lamps NOW! They're *new* — revolutionary — in *active demand!*

Model 3085. Graceful floor stand style with swinging arm and vertical adjustment.

PRICED AS LOW AS $10

Model 3087. Clamp-On style. Clamps quickly to desk, table or other working location.

(Main illustration, above, shows Model 3081)

SEND FOR THIS

CATALOG

Showing 200 models of lamps — all types — to increase lighting equipment sales.

FARIES MFG. CO.

S. Robert Schwartz Div.

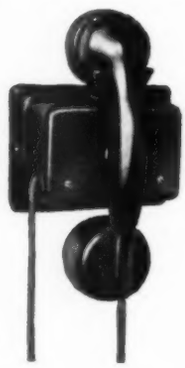
1006 E. Grand Ave. Decatur, Illinois

tween the two conductors at any point in its length when affected by a specified degree of heat from any cause. Cable of "regular" rating operates at approximately 160 degrees F., "high test" at approximately 220 degrees F. The Protectowire Co., Hanover, Mass.

MERCURY LAMP TRANSFORMER——

Two types of transformers for operating two 400-watt mercury lamps. Weatherproof (illustrated), for pole mounting, has terminals accessible at bottom and three threaded hubs so that three fixture mounting supports may be used. Indoor type is rectangular in shape, can be mounted on wall or pole. Terminals reached through small doors at top and bottom. Jefferson Electric Co., Bellwood, Ill.

PUSH BUTTON TELEPHONE———



The Idealfone is of the push button intercom type. Combines standard size plastic handset with compact wall-mounting base which contains push buttons, terminals and bell. A system of the "common talking" type having two to ten stations with choice of private line, code signaling, selective signaling, and master station operation. Automatic Electric Co., Chicago, Ill.

ANGLE STANDLITE———

For illuminating bridges, lot corners, driveways, alleyways, etc., the Standlite is designed to regulate distribution of light, trims it sharply to the ground in one direction and projects it in the other by means of adjustable inner reflector and semi-circular louvre attachment, thus offering efficiency and directional advantages of floodlight for illuminating smaller areas. Goodrich Electric Co., 2901 N. Oakley Ave., Chicago.

GYMNASIUM FIXTURE———

Surface mounting gymnasium fixture consists of heavy guage steel housing with reinforced edges and finished in ivory. RLM dome reflector is mounted independently of housing. Guard of heavy guage wire permanently fastened to housing. Opening in center of guard simplifies lamp replacement and cleaning. Goodrich Electric Co., 2900 N. Oakley Ave., Chicago.

INSULATED PLIERS———

Line of pliers of various types having insulated handles. "Cohardite" insulation has high impact strength, resists cracking when dropped. Handles tested to 20,000 volts on lineman's 8" type to 10,000 volts on meterman's 6", 7" types and on diagonal cutters and long nose pliers. Connecticut Hard Rubber Co., 407 East St., New Haven, Conn.

BED LAMP

Nite-beam bed lamps consist of two-piece Bakelite reflector attached to heavy glass magnifying lens to intensify the light. Has specially designed adjusting joint that permits light to be focused to any position. Heavy stamped clamp, with maximum jaw spread of 2½", is felt lined to prevent marring. Thumb screw for rigid attachment. Eagle Electric Mfg. Co., 59 Hall St., Brooklyn, N. Y.

SUN LAMP

Ultra violet ray sun lamp equipped with the S-4 bulb which provides anti-rachitic ultra-violet rays in considerably less time than previously required for exposure. Has patented adjusting device, a heat-resisting handle. Faries Manufacturing Co., Decatur, Ill.

CONTROL STATION

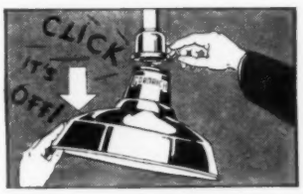
Three-button control station with button mechanism of unit type construction,

NOTHING EASIER

To Install or Service

LIGHTS WHEN IT'S LOCKED

You simply wire and attach the hood to install this lighting fixture. Reflector and lamp is snapped on later. To remove for cleaning, release the snap lock; reflector and lamp comes off as a unit—instantly. To attach, press the reflector into the hood—it locks automatically and lights when it's locked.

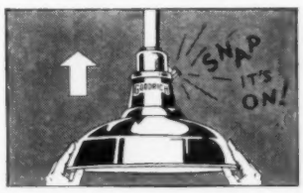


Release snap lock to remove reflector and lamp

DISKONECT REFLECTORS

There's nothing to corrode or stick in the metal-to-glass connection between hood and reflector. Socket is instantly removable for thorough cleaning of reflector. The Diskonect is an exclusive Goodrich product.

Sold only through electrical wholesalers



When it snaps into place, it's locked

MEMBER OF R. L. M. STANDARDS INSTITUTE

GOODRICH

ELECTRIC COMPANY

OFFICES IN ALL PRINCIPAL CITIES

GENERAL OFFICES AND FACTORY: 2921 N. OAKLEY AVENUE, CHICAGO, ILL.

YOU'LL PREFER

SHAWMUT SHUR-LAG

RENEWABLE

FUSES

FOR A DOZEN REASONS

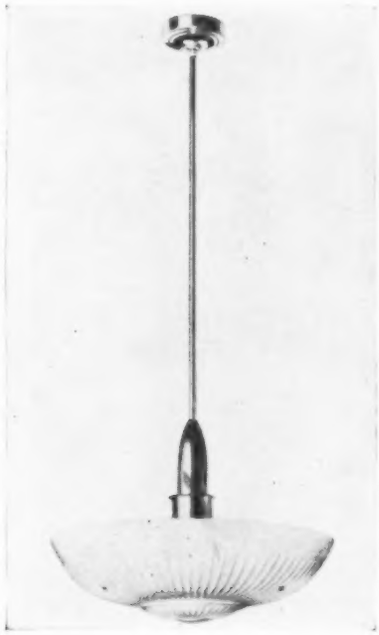
ASK US WHY

The CHASE-SHAWMUT COMPANY

NEWBURYPORT
MASSACHUSETTS

mounted in die-cast box which is open at front and two sides, has conduit opening at one end. U-shaped molded plastic cover complete enclosure. With cover off, all terminals easily accessible. Can be mounted vertically or horizontally. Allen-Bradley Co., 1311 S. First St., Milwaukee.

INDIRECT LUMINAIRE



Line of indirect lighting units with glass basins in 300, 500, 750 and 1000-watt sizes. Clevis pin with two holes for basin rod, allows two positions of basin with relation to husk. Canopy of drawn aluminum. Use bipost lamps. Westinghouse Elec. & Mfg. Co., Cleveland.

SOLDERLESS LUGS

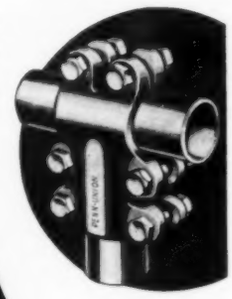
Three sizes of solderless lugs to accommodate wires from No. 14 to 4/0. Can be used on stranded, solid or flexible cables. Cadmium plated to prevent corrosion. Easily bent for angle connections. Body of copper. Saddle protects wire. One piece assembly. Frankel Connector Co., 177 Hudson St., New York, N. Y.

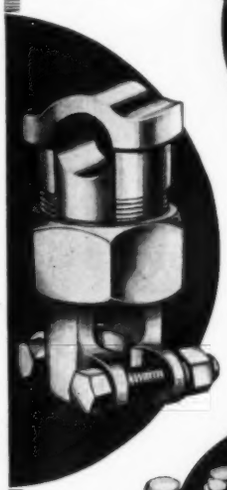
ALL Kinds of Fittings—

for every type of electrical connection. For any combination of tube, bar, cable, or wire.

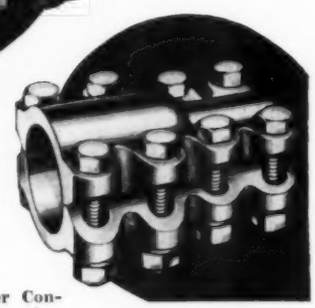
More than 6,200 items.

Clamp Type Tees in all sizes. High copper alloy; machined contact surfaces.





Self-Locking Tees that hold permanently tight. With and without extension.



Reducer Connectors for different sizes of cable. High copper with Everdur bolts, nuts, lockwashers.

You will be interested in the many NEW and IMPROVED fittings in the Penn-Union Catalog. Write for it.

Every item thoroughly tested, and Dependable.

Preferred by leading Utilities and "Industrials."

Sold by leading jobbers

PENN-UNION ELECTRIC CORPORATION

ERIE, PA.

You'll find it in the *complete* line

PENN-UNION

Conductor Fittings

Noland At Spartanburg

Noland Co., with headquarters at Newport News, Va., has opened its fourth electrical branch, this one at Spartanburg, N. C. H. S. Willson is manager; Frank P. Larson, Jr., covers the territory; J. D. Alewine has charge of service; J. H. Thomas sells at the counter. Alewine is a newcomer to Noland, had been with Graybar at Charlotte. Larson was transferred from Newport News. J. G. Councill is a new salesman at the main house. He was with Virginia-Carolina Electrical Supply at Danville.

Graybar Changes

During recent weeks Graybar Electric Co. has made several personnel changes, both in various districts and at headquarters in New York. Charles S. Powell is now manager of the Boston district, including branch houses at Providence, Worcester and Springfield. He started with Western Electric in 1914, has been with the company continuously except for two years when he served in the Army Air Corps during the war. Before his present appointment he was telephone sales manager at headquarters.

A. J. Eaves, formerly research products sales manager, takes over as assistant general telephone sales manager, in charge of telephone and research products departments handling all Western Electric products. Reporting to him are J. B. Long, former telephone sales engineer, now telephone sales manager; G. L. Donnett, former research products sales engineer, now research products sales manager, and L. D. Gore, who continues as sales manager of Western Electric hearing aids.

E. F. Murphy becomes Eastern commercial sales manager. He was assistant sales manager of the New York district office. Starting in 1919 at Chicago, Murphy has been power and light specialist, appliance specialist, and syndicate sales manager.

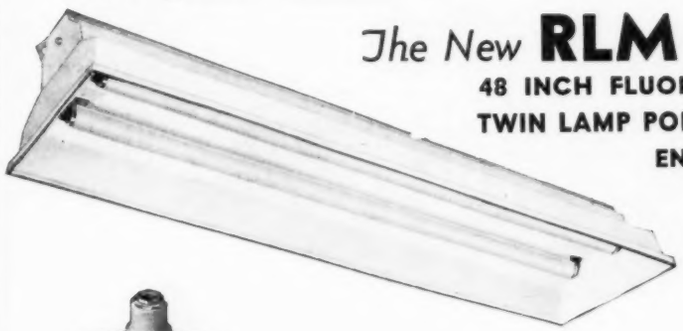
Harry A. Cobaugh, with Graybar 14 years, is now Newark branch manager. He has been closely identified with the electrical industry in the New York and New Jersey territories most of that time. W. A. Moorefield is now branch manager at Winston-Salem, N. C. For the past 13 years he has sold for the company in various southern regions. S. L. Cook, associated with Graybar since 1928 when he joined the company as a salesman at Nashville, has been advanced to manager there.

FOR *DAYTIME*
NIGHT-TIME
OUTDOORS—INDOORS

QUAD

LIGHTING UNITS . .

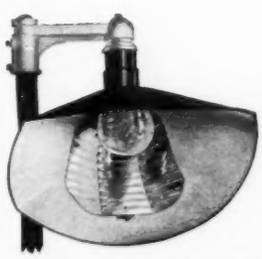
offer unlimited possibilities for good income . . .



The New **RLM**
48 INCH FLUORESCENT TWIN LAMP PORCELAIN ENAMELED UNIT

DUPLEX DOME

RLM STANDARD DOME



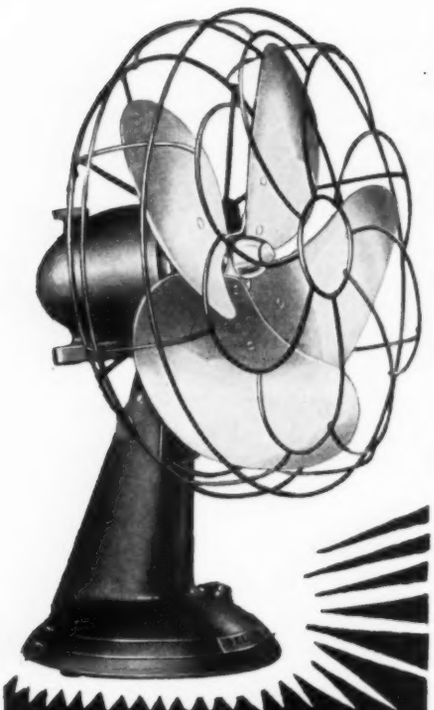
LONG BEAM FLOODLIGHT

Also a complete line of standard and special incandescent type lighting equipment.

Business is on the upgrade and that means more lighting sales opportunities. Here's where QUAD Lighting Units can help you. Put them to work for you. For new jobs and replacement work, commercial or industrial, your customers will find a modern, efficient QUAD Unit that will make an up-to-date, good-looking job.

They can get more jobs, do better work, and give their customers the best possible installations. This means satisfaction all the way along with good, steady income and lots of it. Sell your customers QUAD.

QUADRANGLE MFG. CO. 32 S. PEORIA ST. CHICAGO, ILL.



DELCO DE LUXE
12" and 16" FANS
PRODUCT OF GENERAL MOTORS

The Line of Delco Fans for 1940, of which the Delco Deluxe is a style and sales leader, is so varied and so complete it offers a fan to solve every cooling and ventilating problem of home, store, office and factory.

1940 FAN PROFITS

will depend on your ability to promptly supply your customer with exactly the type of fan needed, and you will be able to do this with Delco Desk, Pedestal, Ceiling, Exhaust and Ventilating Fans, the wonderfully effective Delco Aircirculators and the Delco Northeaster Desk and Ventilating Fans which are the leaders of the low price field.

Send for the 1940 Catalog

DELCO APPLIANCE DIVISION
GENERAL MOTORS SALES CORPORATION
ROCHESTER, NEW YORK

INTERRUPTION but not for long, as C. E. Woodhouse has his pencil all set to get back to writing up that order. He has charge of buying and inside operations for Brady Electric, Elmira, N. Y.

New Spot for Proctor Electric in Chicago

CHICAGO—A complete display of Proctor's line of appliances may be found at the company's new offices in the Merchandise Mart. Mr. W. Trittipo heads up the Chicago sales organization.

Washington Dinner

On January 17th, some 300 members of the Electric Institute of Washington (D. C.), gathered for their Sixth Annual Dinner, heard talks by A. G. Neal, president, Potomac Electric Power Co., and Dr. Wm. McClellan, president, Union Electric Co. of Missouri, former head of Potomac Power.

Officers for this year were installed and two of them are wholesalers—Ward Stringham of G.E. Supply is president and J. F. Myers of Westinghouse Supply is treasurer.

Shaw Upped By Hyland

CHICAGO—Last month, Lester W. Shaw took over his new work as sales manager of Hyland Electrical Supply Co. Before this promotion, which was announced by Charles H. Weicensang, vice president and director of sales, Shaw was manager of the appliance department. Now he also manages sales of the industrial department.

even
BETTER MOUSETRAPS
would sell better today, thru Wholesalers.

ILSCO

SOLDERLESS LUGS

— the better pressure connectors, do!

That's why we encourage your customers, every chance we get, to look to *you* not only for ILSCO Solderless Lugs, but for *all* their electrical supplies.

For a fuller story, write *TODAY* for new ILSCO catalog.

DEPT. 2WS

Ilsco Copper Tube & Products, Inc.
5629 Madison Road, Cincinnati, Ohio

FUSES ABOVE COMPETITION

A pretty broad statement? But any Jobber's salesman pushing TRICO "Powder-Packed" Renewable Fuses knows what we mean.

He knows that the renewal element of a TRICO fuse cannot be interchanged with any other type. He alone gets all the repeat business.

He knows too, that his customers are guaranteed better service because each TRICO Renewal Element is custom-built and loaded with engineering values that promote safety, efficiency, proper time-lag and dependable performance—all at NO EXTRA COST.

And TRICO'S *"Thru the Wholesaler"* policy is real PROFIT PROTECTION.

That's why TRICO FUSES are above competition—and why you should

SELL TRICO

Trico Fuse Mfg. Co., Milwaukee, Wis., U.S.A.

TRICO POWDER PACKED FUSES
STOP WASTED KILOWATTS AND WASTEFUL SHUTDOWNS

Plymouth Rubber On The Record

Plymouth Rubber Co. has tied-in with the general keen interest in phonograph records and recently used this medium to reiterate its strong wholesaler policy and tell the story of the new Slipknot Brown Tape. These records, sent to wholesalers in all parts of the country, were used instead of circular letters.

Roaster Drive In Second Year

The Modern Kitchen Bureau's electric roaster campaign is going into its second year, with past experience to draw upon and hard-hitting plans for '40. Such a cooperative drive gets results, will go over still bigger if wholesalers' salesmen tie in through helping dealers sell more of these useable and saleable appliances.

Advertising will be increased and tentative plans include ads in Saturday Evening Post, Good Housekeeping, McCall's, Woman's Home Companion, Ladies' Home Journal and Better Homes and Gardens.

Complete details are also available for using this national program in each territory, plus display materials, spot radio announcements, newspaper ads.

FOR 21 YEARS J. J. Madden, vice president and sales manager for Raco All-Steel Products, has been on the electrical scene and closely identified with the Box Business since the days of the old Potter box. Then he was with Roach-Appleton until that company was acquired by All-Steel-Equip in 1933. Thereafter Roach-Appleton was operated as a subsidiary, with Jim as vice president and sales manager of the combined electrical products of both organizations.

A GOOD SIGHT BETTER FOR YOUR SALES

—Be a Seeing Specialist

SELL LOCALIZED LIGHTING

Think of the tremendous importance of light to industry — its absolute necessity for every task. No product is so human—no product so vital to the welfare and efficiency of workmen and workwomen — no product is so blessed with opportunities for improved use. What could be more thrilling to sell — or offer greater sales potential and successful promotion?

Start, now, to establish yourself as a "Seeing Specialist" and cash-in on industry's general need for better lighting. Obviously, you should begin by recommending lighting that fits light to individual operators because localized lighting is primary for seeing on the job. The more you analyze the "seeing" requirements for various operations you inspect, the more evident will be the big sales future to you.

Call on Fostoria, today, to help you become an "expert on seeing." You'll quickly get the cooperation you need to advance yourself in this important field and profit with new volume sales.

Use this book for increased sales in 1940

ENGINEERED fostoria LOCALITE

FLEXIBLE ARM UNITS
LARGE AREA LOW BRIGHTNESS UNITS
FLUORESCENT UNITS

THE FOSTORIA PRESSED STEEL CORP.
FOSTORIA, OHIO

FLOOR BOXES *and* WIRING SPECIALTIES

No. 285 Double Duplex Receptacle Nozzle

The most attractive, compact and easy-to-install fitting on the market. Shown in illustration with No. 200 Cover Plate.

No. 284 Duplex Receptacle Nozzle

With ½" brass pipe extension. Neatest and most compact fitting obtainable. Also available with ¾" pipe extension. Fullman also offers Duplex Telephone Nozzles.

No. 130 Adjustable Water Tight Floor Box

No. 130 Box with No. 207 Bell Nozzle. Cut-away view illustrates how tapered unit receptacle fits tapered opening in adjustable ring. Cover plate 3½" — overall height 3½".

• The *Latrobe Line* is complete for all residential, commercial, and industrial requirements. In addition, the entire line is designed with the idea of reducing installation time . . . an important point to consider when selecting floor boxes and wiring specialties

Write for details TODAY!

FULLMAN MFG. CO.

LATROBE • PENNA.

MORE FACTS ON PRODUCTS

Outlet Boxes—Catalogue sheet showing Bakelite outlet boxes made by Union Insulating Co., Parkersburg, W. Va. Sizes and illustrations also covering the covers.

Insulating Compound—A leaflet from General Electric describes "Thinwol" an insulating compound with 85-percent New-rubber content for thinwall applications on multiconductor control cable.

Capacitors—Cornell-Dubilier Elec. Corp., South Plainfield, N. J., has issued catalogue No. 162, which in 16 pages, gives data on replacement motor starting capacitors for electric refrigerators, oil burners, and other motor driven equipment. Listed are replacements to use with various makes and sizes of motors.

Drill Chart—One-page, ready reference chart showing correct size Carboloy Masonry Drill to use for 36 well-known makes of expansion anchors and shields of various sizes. Drills are for drilling all types of construction materials. Issued by Carboloy Co., Detroit.

Air Circulators—Pocket size, 16-page booklet giving complete information on floor, wall, ceiling, attic and exhaust fans manufactured by Circulators and Devices Mfg. Corp., 100 Prince St., New York.

OBITUARIES

Albert H. Elliot

Albert H. Elliot, secretary of the Pacific Division of the National Electric Wholesalers Association since the organization was founded in 1908, died in Oakland, Cal., his home, after a short illness, January 18. Revered both as an

Reflecto Duct*

for Fluorescent

NOW MADE FOR TULAMP BALLASTS

These Tulamp Ballasts will operate Two Lamps, with separate starting switch, at high power factor and with less flicker

Made in two Types for 36" and 48" lamps

Model Tulamp—36—$12.50 List

Model Tulamp—48—$15.50 List

Ballast, lamps or sockets not included.

Write for circulars.

REFLECTORS, INC.

3225 Frankford Ave., Philadelphia, Pa.

*Registered U. S. Patent Office and Patent Pending

SPEED UP YOUR PROFITS

By Using These IDEAL Products

1. **Wire-Nuts.**—Millions used in preference to solder and tape methods. They speed production—improve work. Skin wires—Screw on—**That's All!** Fully approved.

2. **"E-Z" Wire Strippers.**—Strip the toughest insulation without nicking or cutting strands. Strip solid or stranded wires No. 30 gauge to No. 5.

3. **Cable Ripper**—Easily and cleanly rips non-metallic sheathed duplex or lead covered cable.

4. **Joist Boring Machine.**—A fast mover. Ends tiresome and dangerous reaching. Bores at any angle. Reaches up to 11 ft.

5. **Fuse Clip Clamps**—Here is a device that has real sales appeal. For Ferrule or Knife type clips. Seven sizes.

6. **Fish Tape, Reel and Puller.**—Big Selling. 3-in-1 Tool . . . Easily fits tool kit. Keeps tape reeled up. Eliminates breakage and "live" contacts.

7. **Test-Lite & Fuse Puller.**—Tests live circuits, pulls fuses. Electricians **really use** this combination Test-Lite and Fuse Puller because of its handy pocket size.

8. **Fuse Reducers:**—Stop over fusing. Many sizes.

9. **Fuse Pullers** — Laminated Fibre, four sizes.

IDEAL SOLD THROUGH JOBBERS

Electrical Products Division

Ideal Commutator Dresser Company

1047 Park Avenue Sycamore, Illinois

attorney and a secretary he was mourned by the legal and electrical professions with which he had been affiliated since about 1900, shortly after being admitted to the bar, in 1893.

Mr. Elliot was born June 29, 1868, in San Francisco, was class valedictorian when graduated from Sacramento High school in 1887, and commencement speaker for the University of California, class of 1891. He was a Phi Beta Kappa. He served in the Spanish American war as master's mate aboard the U. S. S. Iroquois, and for eight years was a member of Oakland's city council.

Pioneer in trade association work, Mr. Elliot started about 1900 as secretary for a local group of wholesalers' credit managers, then became secretary of the local Electrical Supply Jobbers' Association in 1906. Twice he saved the records of the association from fire, first in 1906 during the San Francisco Holocaust, and in 1924 when the Del Monte Hotel burned. He also served as attorney for the Japanese consulate in San Francisco and was decorated by the Japanese government.

Albert F. Thacher

Albert F. Thacher, 76, one of the pioneer electrical wholesalers, died January 20 at West Palm Beach, Fla. Always active, and greatly interested in the electrical business, Mr. Thacher kept in touch with it as a partner in the retail store of Felder-Bell there in West Palm Beach, even though he had sold his New York wholesale house and retired some years ago.

Mr. Thacher started his business career in the wholesale dry goods field, but soon gave that up to become a contractor and real estate subdivider. He was highly successful, but decided to prospect for gold. He went to Colorado where his good luck left him and within six years his cash was gone.

This time Mr. Thacher returned to New York, sold for the Lynn Lamp Co. Again he was successful and within a few years bought the Alpha Electric Co., a wholesale house. He built it into one of New York's largest distributorships and sold out to Westinghouse about 1926.

More Profit on Every Job

When You Use TELESCOPE BM SYSTEM Connectors and Couplings

THE SIMPLE METHOD!

Here's Why

- Save 25% on material
- Save 25% to 50% on time
- Quick, easy, installations
- Eliminate complications
- Stronger, neater connections
- No fussing with nuts to tighten

$1.35 Buys the One Tool Needed

This one patented tool (½" B.M. Indenter) handles 80% of all installations. Pays for itself many times over on the very first job.

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The ALLEN FLUX-a SODER-b

'Most Fifty Years of Dependable Manufacture

STICKS
PASTE
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WHOLESALERS: WE GREET YOU —AND YOUR APPRECIATION

Write For SAMPLES • LITERATURE • PRICES

L. B. ALLEN CO. INC. SOLDERING SUPPLIES

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CHICAGO, ILLINOIS

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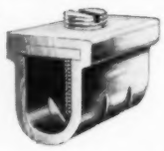
NEW... an ideal leader for your 1940 Fan Line!

Here's a streamline 10 inch COOL SPOT oscillating fan that through the use of heavily pitched, quiet type fan blades and slow speed Induction motor delivers 610 C.F.M. and is unusually efficient and quiet . . . adjustable for oscillating or non-oscillating operation. Its other features mark this fan as dependable quality at the right price. Write for complete catalog information, and be sure your stock includes this new fan.

SIGNAL ELECTRIC MFG. CO.
MENOMINEE, MICHIGAN
OFFICES IN ALL PRINCIPAL CITIES

SIGNAL

Sherman solderless connectors are strong, well made, easy to use — and they'll carry BIG LOADS. Made in a wide range of types and sizes, for virtually all requirements. Write for Bulletin 22.



Wedge-Grip Connectors — Pure copper, with non-removable screw. Designed to provide extra wedging and snubbing action.

Split Bolt Connectors — Highest grade special alloy bronze, with strong, clean, machine cut threads. Solid spacer, full hex head. With or without nut retainer.

H. B. Sherman Mfg. Co.
BATTLE CREEK, MICH.

"FRIGID" PEDESTAL FANS
Reg. U.S. Pat. Off.
Guaranteed—Quiet—Low Cost
"Frigid" Air Circulators utilize the recently developed "Quiet" Air propellers, which are exclusive with our fans.
Oversize motors — chromium stand and fittings. By actual performance "Frigid" leads the field.
Excellent opportunity for "live wire" Salesmen with this low cost—high quality line.
Write for Catalog, Quantity Discounts and Further Information.

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100 Prince Street, New York, N. Y.

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